

# Scott County Solid Waste Management Master Plan

November 20, 2018



Scott County

Environmental Services Department  
Community Services Division

## **SCOTT COUNTY**

### **SOLID WASTE MANAGEMENT MASTER PLAN**

THE SOLID WASTE MANAGEMENT MASTER PLAN IS RECOMMENDED BY THE SCOTT COUNTY SOLID WASTE ADVISORY COMMITTEE (SWAC). THE MASTER PLAN WAS APPROVED FOR SUBMITTAL TO THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BY THE SCOTT COUNTY BOARD OF COMMISSIONERS.

#### **2018 Scott County Board of Commissioners**

District 1 - Commissioner Barb Weckman Brekke, Board Vice-Chair

District 2 - Commissioner Tom Wolf, Board Chair

District 3 – Commissioner Michael Beard

District 4 – Commissioner Dave Beer

District 5 - Commissioner Jon Ulrich

#### **RECOGNITION**

THE SCOTT COUNTY BOARD OF COMMISSIONERS AND COUNTY STAFF WISH TO RECOGNIZE THE SERVICE TO THE COUNTY BY THE SWAC MEMBERS IN PROVIDING DIRECTION FOR THE DEVELOPMENT OF THIS MASTER PLAN.

Tom Nikunen, City of Jordan Administrator

Kenneth D. Ondich, City of New Prague Planning Director

Mark Nagel, City of Elko New Market Assistant City Administrator

Bob Pieper, Louisville Township

Barbara Kane Johnson, Scott County Planning Advisory Commission

Mike Buckingham-Hayes, Buckingham Disposal, Inc.

Mark Pahl, Dem-Con Companies, LLC

Kevin Tritz / Ryan Tritz, Specialized Environmental Technologies

Al Fridges, Shakopee Mdewakanton Sioux Community

Meg Glatty, Citizen

Belinda Eastlake, Citizen

THE FOLLOWING COUNTY STAFF CONTRIBUTED TO THE DEVELOPMENT OF THIS MASTER PLAN:

Paul Nelson, Environmental Services Manager

Kate Sedlacek, Environmental Health & Waste Programs Supervisor

Steve Steuber, Environmentalist II

Nick Reishus, Environmentalist II

## Contents

SECTION 1 INTRODUCTION .....	4
Using the Master Plan .....	7
The Solid Waste Management System in Scott County .....	7
Private and Non-County Systems .....	12
County Programs .....	14
Financing the Solid Waste Management Program .....	21
Future Considerations .....	22
SECTION 2 SCOTT COUNTY GOALS AND POLICIES .....	26
SECTION 3 PLANNING PROCESS .....	29
SECTION 4 STRATEGIES .....	31
Regional Solutions .....	31
Source Reduction and Reuse .....	32
Collection Best Practices .....	34
Recycling Management Traditional & Non-Traditional .....	35
Organics Management .....	37
Non-MSW .....	40
Recycling Market Development .....	41
Organics Markets .....	42
Emerging Technology .....	43
Product Stewardship .....	44
Resource Recovery of MMSW .....	46
Conclusion .....	46
SECTION 5 IMPLEMENTATION .....	47
Regulation .....	49
Incentives .....	49
Collaboration and Management .....	51
Household Hazardous Waste .....	53
Financing Implementation of the Plan .....	56
Effect on Business .....	57
Closing the Circle .....	58
APPENDIX I STRATEGY IMPLEMENTATION SCHEDULE .....	i

APPENDIX II: EXISTING SOLID WASTE MANAGEMENT SYSTEM DESCRIPTION .....	v
APPENDIX III: ACRONYMS .....	xxxi
APPENDIX IV: SOLID WASTE ADVISORY COMMITTEE .....	xxxii
APPENDIX V: GRANT INFORMATION AND REQUIREMENTS .....	xxxiii
APPENDIX VI FUTURE IQ SOLID WASTE MANAGEMENT REPORT .....	xxxvii

## SECTION 1 INTRODUCTION

The Scott County 2018-2038 Solid Waste Management Master Plan (Master Plan) defines Scott County's plan for managing waste through 2038 in accordance with the State of Minnesota's Solid Waste Management Hierarchy (Figure 1).

The Master Plan builds on the strength of previous plans and identifies specific new and existing strategies to enable the County to meet the goals of the Minnesota Pollution Control Agency (MPCA) Metro Solid Waste Policy Plan (Policy Plan), and

to minimize landfilling of Municipal Solid Waste (MSW). This Master Plan replaces the Scott County Solid Waste Management Master Plan adopted by the Scott County Board of Commissioners on August 7, 2012.



**Figure 1: Waste Management**

The Master Plan was revised in accordance with Minn. Statutes § 473.803 and 115A which govern waste management in Minnesota, and require Twin Cities Metropolitan Area (TCMA) counties to revise their solid waste master plans following the MPCA's release of their Policy Plan. The MPCA Policy Plan was released April 2017. This Master Plan identifies Scott County's approach toward achieving the Policy Plan objectives, the statutory 75 percent recycling rate goal, and other statutory requirements. The County is concerned that some of the numerical objectives in the Policy Plan, particularly near term landfill and resource recovery and long term recycling are unrealistic, but is compelled to adopt the objectives contained in the Policy Plan (Table 1).

There were some significant changes in the current Policy Plan as compared to the previous Policy Plan released by the MPCA in 2012. These changes were due to Legislative actions that include:

- A change in Minnesota Statute § 115A.151 that expanded the definition of a public entity to include mandatory recycling for certain businesses.
- The new legislative goals and requirements of Minnesota Statute § 115A.551 that requires achieving an accumulative recycling rate of 75 percent by 2030 (up from the previous requirement of 50 percent).
- An increase in the Governor's Select Committee on Recycling and the Environment Funding (SCORE) in 2017 to counties where at least 50 percent of the increase is to be spent on organics recovery.

- An increased emphasis on compiling better data resulting from a legislative audit completed in 2015, and an MPCA effort to replace the old reporting system with a revised system with facilities and haulers reporting directly to the MPCA, eliminating County estimates.

The result is a more prescriptive Policy Plan, with a greater emphasis on organics recovery, and more aggressive landfill abatement objectives (Table 1). These changes and objectives are reflected in the strategies and implementation efforts adopted by Scott County in this Master Plan.

The Waste Management Act (Minn. Stat. § 115A.551) was passed in 1980 to protect the state's land, air, water, natural resources, and public health. It requires the County to reduce solid waste generation (§ 115A.555). In 2014, State Law was changed to require TCMA counties to achieve a 75 percent recycling rate goal (up from 50 percent) by 2030 (Minn. Stat. § 115A.551). Additional waste management statutory requirements for counties that are addressed in this Master Plan include:

- Ensure that residents have the opportunity to recycle (Minn. Stat. § 115A.552);
- Ensure at least one recycling center is available in the County to collect recyclable materials (Minn. Stat. § 115A.552);
- Provide information on how, when, and where materials may be recycled (Minn. Stat. § 115A.552);
- Develop a promotional program that publishes notices at least once every three months and encourages separation of recyclable materials (Minn. Stat. § 115A.552);
- Implement a Household Hazardous Waste (HHW) management plan including broad-based HHW education, reduction, separation from trash and collection, storage, and proper management (Minn. Stat. § 115A.96);
- Encourage building owners and managers to provide appropriate recycling services (Minn. Stat. § 115A.552);
- Ensure that materials separated for recycling are taken to markets for sale or to recyclable material processing centers (Minn. Stat. § 115A.553);
- Develop and implement – or require political subdivisions to develop and implement – programs, practices, or methods designed to meet the state-established recycling goal (Minn. Stat. § 115A.551);
- Include in its Master Plan a recycling implementation strategy for meeting the state-established recycling goal (Minn. Stat. § 115A.551);
- Provide for the recycling of problem materials and major appliances (Minn. Stat. § 115A.552); and



- Include in its Master Plan a hazardous waste management plan with a public education component, household hazardous waste reduction strategy, and a strategy for the separation and proper management of household hazardous waste (Minn. Stat. § 115A.96).

Scott County's previous Master Plan addressed all of these requirements, except that targeted a recycling rate of 50 percent. The second column in Table 1 presents the current percentages of recycling, organics recovery, MSW processed, and MSW landfilled in Scott County for 2016. The future objectives are from the MPCA Policy Plan projected out to the year 2036 and estimated as necessary to minimize the landfilling of MSW to meet the 75 percent recycling goal of Minnesota Statute § 115A.551.

**Table 1: MSW Management System Objectives (MPCA, 2017)**

<b>MSW Management System Objectives in Percentages (2016-2036)</b>					
<b>Management Method</b>	<b>Current Scott County System (2016)</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2036</b>
<i><b>Floor – The lower range of the percentages below represent the minimum amount of MSW that must be managed by these methods.</b></i>					
<b>Source Reduction &amp; Reuse (cumulative)</b>	NA	1.5%	3%	4%	5%
<b>Recycling</b>	43.6%	51%	54%	60%	60%
<b>Organics Recovery</b>	14.5%	12%	14%	15%	15%
<i><b>Mandatory Processing – The percentages below represent the amount of resource recovery expected to occur after maximizing reduction, recycling and organics recovery. Restrictions on the land disposal of processible MSW will be enforced.</b></i>					
<b>Recovery</b>	7.1%	35%	31%	24%	24%
<i><b>Ceiling - The percentages below represent the maximum amount of MSW land disposal that will be allowed.</b></i>					
<b>Max Landfill</b>	35.2%	2%	1%	1%	1%

**\*Recycling and Organics Recovery combined equal the 75% recycling goal (reduce and reuse are not included)**

Achieving these outcomes will be challenging. In order to do this Scott County and its Solid Waste Advisory Committee (SWAC) believe that it will be important to learn and adapt quickly while implementing this plan. This Master Plan communicates Scott County's vision, policies, strategies, and programs for solid waste management over the next twenty years. However, it will be revised again in six years based on statutory requirements, and as such, the Master Plan is more detailed for this initial period. That said, adapting in six year increments will not be sufficient to address challenges – it needs to be on-going, and Section 5 of this Master Plan includes a description of metrics that will be used to track progress and make interim decisions about adapting. As discussed in a number of places in the Master Plan, globalization of commodities, changing waste streams and materials, and rapidly evolving technology requires an extremely flexible and adaptive approach.

However, all stakeholders including the MPCA, Scott County, municipalities, waste generators will be held accountable for meeting the objectives in Table 1.

## **Using the Master Plan**

This Master Plan consists of five sections plus appendices.

- Section 1 provides an introduction, puts solid waste management in historic context, summarizes the current management system and performance in the County, and highlights future trends and demographics that were considered in developing this revised Master Plan. Details, such as the types of facilities and specific services currently offered in the County are provided in Appendix II.
- Section 2 presents the County's goals, vision, mission, and how they link to solid waste management. The section also adopts the legislative recycling goal and MPCA's objectives (Table 1), and acknowledges the goals and policies as articulated in their Policy Plan. This section ends by presenting Scott County specific policies organized into topical areas included in the County's Mission.
- Section 3 describes the Solid Waste Advisory Committee, their role, and the process used to revise the Master Plan.
- Section 4 provides a discussion of the strategies recommended by the SWAC and selected by the County for implementation. The presentation of strategies is organized according to the 10 Key strategy topical areas (e.g., Regional Solutions, Source Reduction and Reuse, etcetera) found in the MPCA Policy Plan.
- Section 5 organizes the selected strategies by bundling them into the various solid waste management subprograms of the County (i.e., Education and Outreach, Regulation, Incentives, Collaboration and Management, and Household Hazardous Waste Facility Operations). Details are provided for each program showing how and when all the strategies will be implemented. The Section also discusses accountability, how the County will measure progress, learn, and adapt accordingly.

## **The Solid Waste Management System in Scott County**

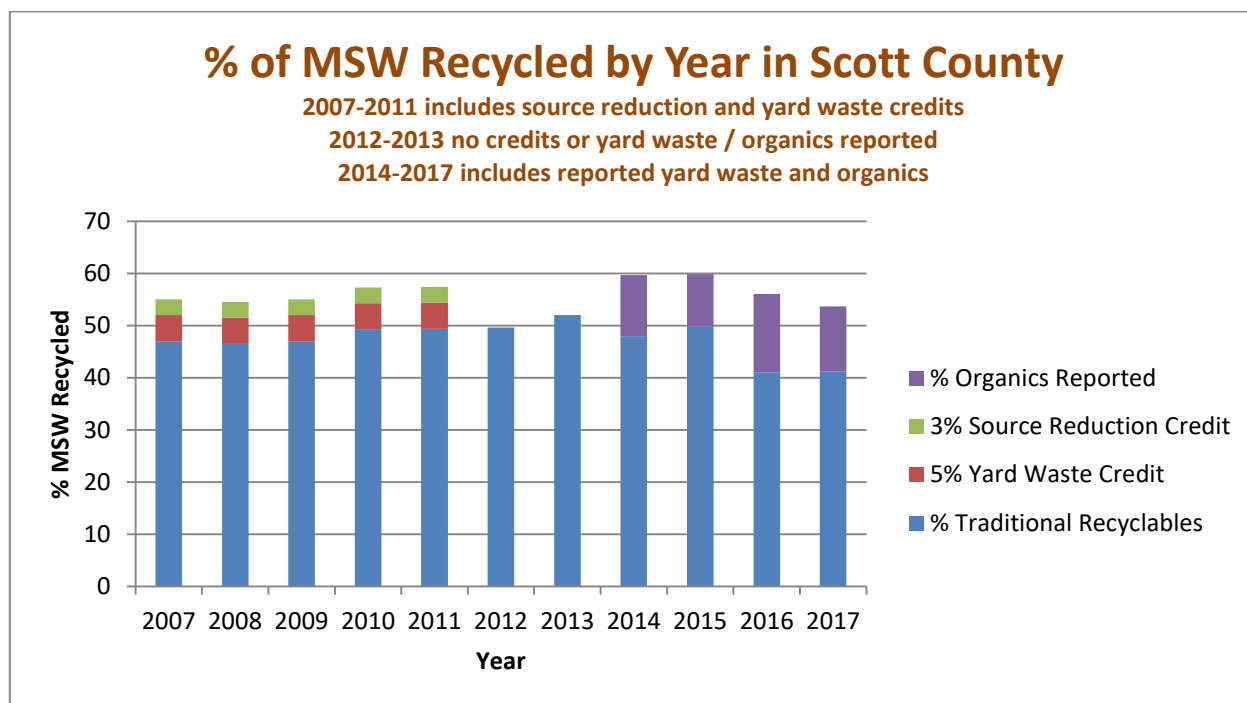
Scott County started efforts to manage solid waste with the passage of the Minnesota Waste Management Act in 1980, which required counties in Minnesota to develop solid waste management plans and begin to establish programs to recycle. The first Scott County Master Plan was submitted



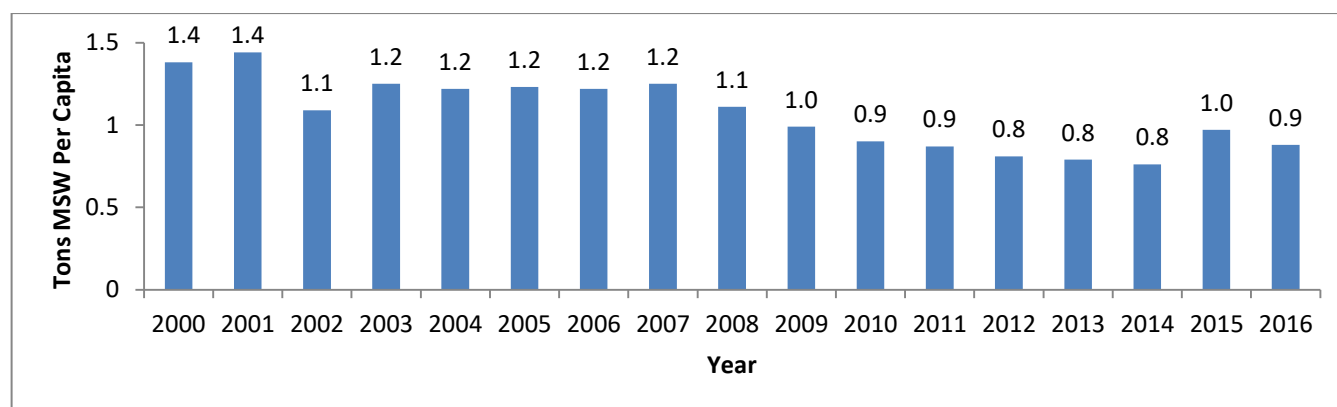
in 1981. The 2018 Master Plan represents the seventh revision since that time. This section presents a review of solid waste management in the County, and describes the current state, as it has evolved under the past plans. Presentation of this information is brief, focusing on trends and major systems. A more detailed description is in Appendix II. As shown in Figure 2, the combined traditional, yard waste, and source separated organics recovery rate (recycling rate) has reached or have exceeded 50 percent for the past several years. There is a long way to go, however, to reach 75 percent by 2030. As shown in Table 1, MSW used for energy recovery or processing is rather low with 2016 at only 7.1 percent and percent and the amount being landfilled at 35.2 percent.

Figure 2, however, does not tell the full story and in years prior to 2014 data either did not include organics, or did so with credits. Thus, historic data from Scott County SCORE reports to the MPCA were analyzed by individual waste components (i.e., traditional recycling, organics recovery, resource recovery, landfill, and MSW waste managed per capita). This analysis is summarized in the following graphs.

The Policy Plan objective for TCMA counties is to reduce waste four percent by 2030 and five percent by 2036. However, the MPCA has not defined actual reduction and reuse measures for reporting purposes. Measuring changes in the total amount of MSW managed is not sufficient in tracking progress for source reduction efforts because it does not take into account increases in the County's population or trends in how much American households are purchasing. Therefore, the County measures source reduction as waste per capita (Figure 3), which has decreased over time and is currently around 0.9 tons per capita. For comparison, neighboring Dakota County the rate over the past few years has ranged from 1.0 to 1.2 tons per capita (Draft 2018-2038 Solid Waste Master Plan, 2017), and Seattle Washington (an area known for progressive solid waste management) the amount in 2016 was 1.1 tons per capita (calculated from tons of MSW generated as reported in the Seattle 2016 Recycling Data Report and the 2016 population of Seattle). Reducing this further given that it is already relatively low in Scott County may be challenging. However, continuing to keep it low, and lowering where possible, aids landfill abatement.



**Figure 2: Scott County Recycling Rate (traditional recyclables, yard waste, and source-separated organics)**

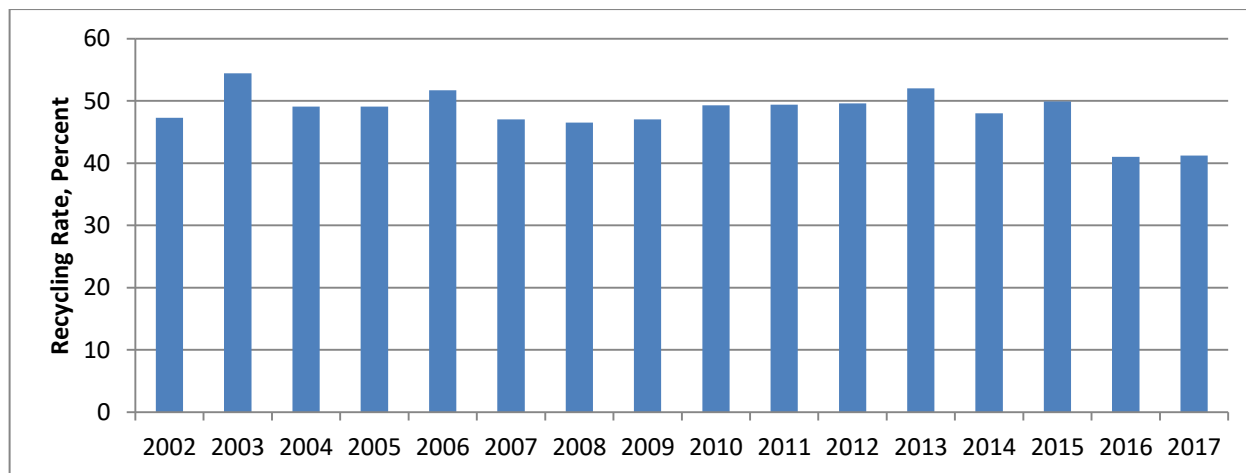


**Figure 3: Scott County MSW Managed Per Capita, 2000 – 2016 (tonnage from SCORE Reports, population from Met Council and Census data)**

Scott County’s historic recycling performance excluding organics is presented in Figure 4. The recycling rate is defined as the total tons of MSW recycled divided by the total tons of MSW managed. In general the rate has ranged between 45 and 55 percent and since 2007 was going in a positive direction with the exception of the last two years. Reaching 51 percent and 54 percent by 2020 and

2025, respectively is reasonably achievable as the Scott has achieved these rates in the past. However, as discussed later the population growth expected in the county will add an additional challenge. Reaching 60 percent by 2030 will be challenging. This will be challenging not only because it is aggressive and the population is growing, but also because the waste stream is changing. For example, recyclables such as plastics are becoming lighter so there is less weight being generated and therefore less being recycled. There is also a rapid increase in composite materials that are difficult to recycle. In addition, less paper is being generated and therefore recycled as more information is consumed digitally.

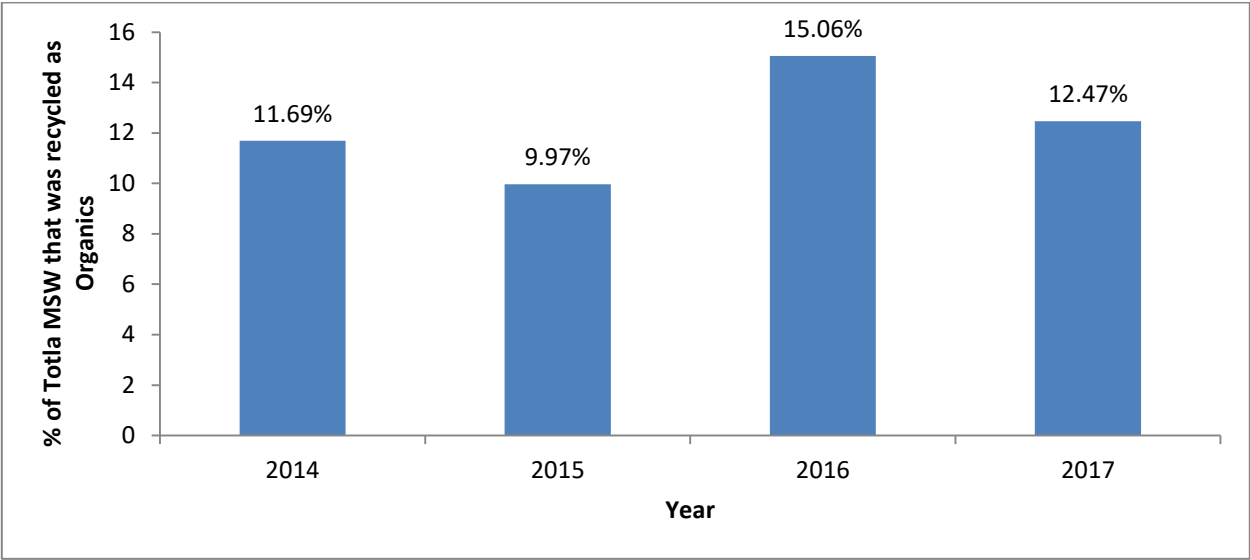
Figure 5 presents the organics recovery rate for Scott County. Organic materials include food waste, compostable products (e.g., non-recyclable paper), and yard waste. The organics recovery rate is defined as the tons of organics recovered divided by the total tons of MSW managed. Figure 6 presents the actual tonnage source separated organics material (SSOM) and yard waste recovered by year. Tracking actual organics recovery rates only goes back to 2014. In 2012 and 2013 organics recovery was not reported, and prior to 2012 credits were applied rather than actual recovery amounts.



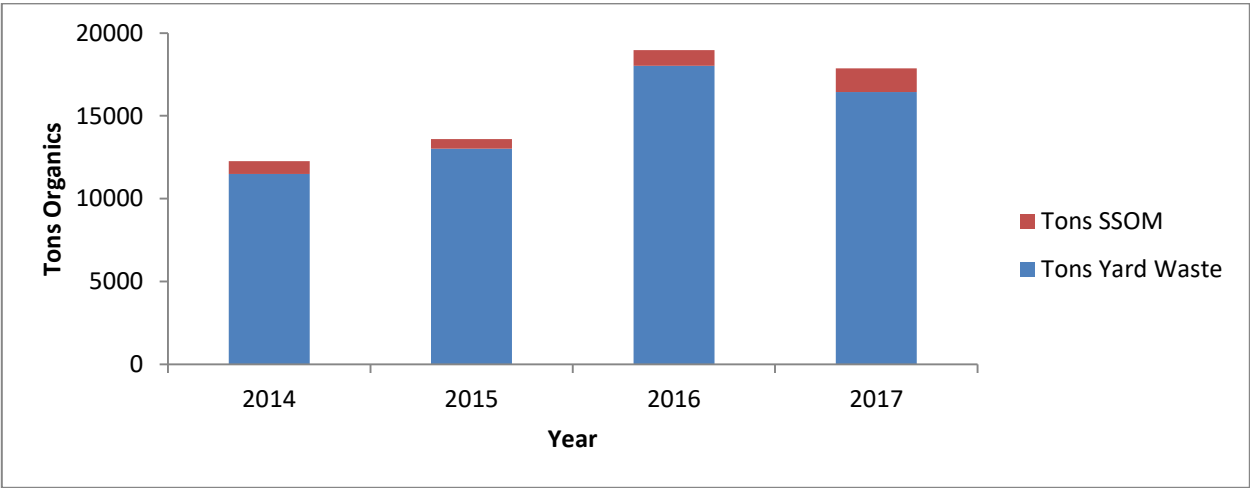
**Figure 4: Scott County Recycling Rate (excluding organics), 2002 – 2017 (from SCORE Reports, corrected for 2015 and 2016)**

The organics recycling rate as shown in Figure 5 exceeds the 12 percent rate set as the objective in the Policy Plan for 2020, and is close to the long term objective of 15 percent for 2030. However, as can be seen from Figure 5 this is largely from yard waste. The intent of the TCMA objective(s) is to increase the amount of organics recovered from source-separated programs (e.g., food to people, food to livestock, and food for composting). The Policy Plan indicates that TCMA MMSW (which by definition bans yard waste) is comprised of 28 percent organics based on Ramsey/Washington and

MPCA Composition Analyses in 2013. Twenty eight percent of the estimated 126,900 tons of MMSW (MSW minus yard waste) generated in Scott County in 2017 is 35,500 tons. Comparison with the SSOM tonnages (i.e., 1,000 to 1,500 tons) recovered in Figure 6 shows that there is room to increase SSOM recovery in the county.



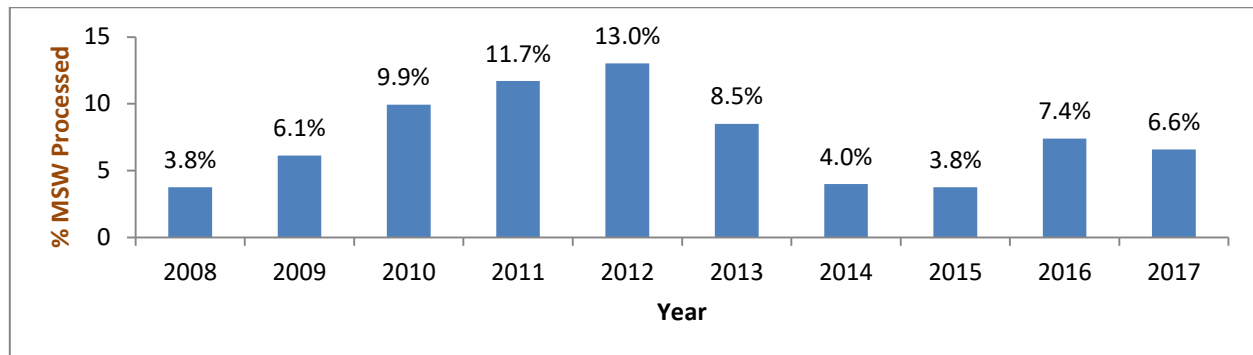
**Figure 5: Scott County Organics Recovery Rate, 2014 – 2017 (from SCORE Reports)**



**Figure 6: Scott County Organics Recovered, 2014 – 2017 (from SCORE Reports)**

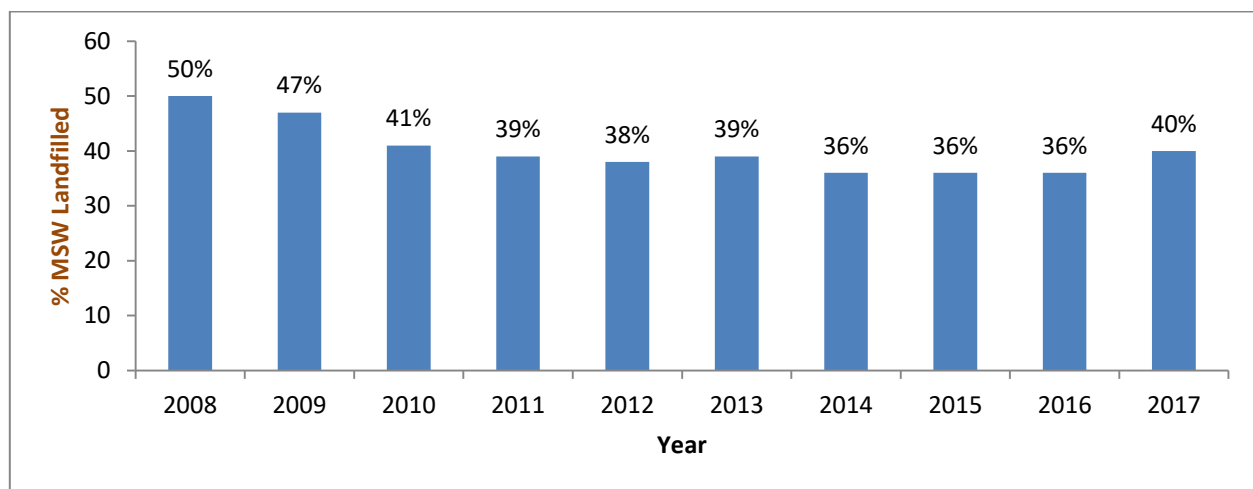
Figure 7 presents the Resource Recovery (i.e., waste to energy) rates for Scott County for the past ten years. These rates are low. The County is not on track to make significant progress toward the MPCA Resource Recovery objective of 24 percent by 2030. Progress will remain difficult unless new capacity

is made available for Scott County waste that is within a transportation distance that is economically competitive with other disposal alternatives.



**Figure 7: Scott County Resource Recovery Rates, 2008 – 2017 (from SCORE Reports)**

The County's landfill disposal rate has been between 36 and 40 percent for a number of years (Figure 8). Achieving the MPCA Policy Plan objective of two percent by 2020 is unrealistic, and achieving one percent by 2030 will be extremely challenging for Scott County.



**Figure 8: Scott County Landfill Disposal Rates, 2008 – 2017 (from SCORE Reports)**

### Private and Non-County Systems

Historically, the solid waste management system in the County has been mostly privately operated. The only County facility is the Household Hazardous Waste facility. One city in the County has a drop-off site for yard waste and another city has a drop-off site for selected recyclables such as paper and cardboard.

The low processing percentage for 2016 in Table 1 is a reflection of the fact that there are no processing facilities located in the County, and processing costs are generally higher than landfilling.

There are also no open MSW landfills in Scott County, meaning that all MSW is hauled to facilities outside the County. In 2016, 44,765 tons of MSW generated in Scott County was landfilled. Of the total of MSW that was landfilled, 37,270 tons was delivered to the Burnsville Landfill and 9,494 tons was delivered to the Pine Bend Landfill, both of which are located in Dakota County.

There is one licensed demolition landfill currently operating in Scott County. Dem-Con Landfill, which is open to the public, receives construction and demolition debris as well as industrial waste. Dem-Con's permitted landfill capacity is approximated to last for twenty to twenty-five years, based on current receiving rates.

Buckingham Disposal operates a drop-off center for recyclables open to the public. This business accepts all commonly recycled materials, as well as used oil, oil filters, batteries, appliances, yard waste, electronics, tires and scrap metal.

Dem-Con Recycling and Recovery is located adjacent to the Dem-Con Landfill in Louisville Township. This facility, designed for construction and demolition debris only, opened in 2008. Loads containing recyclable content are tipped at this facility and processed; wood, concrete, asphalt, steel, cardboard, and other recyclable materials are separated for recycling. Dem-Con also opened a shingle recycling operation in 2009. This facility accepts tear-off and manufacturer reject shingles for processing. The shingles are sorted and processed for use as a substitute for oil in hot mix asphalt.

In 2017 Scott County licensed 38 haulers who collect and transport both MSW and demolition or construction debris. Of the 38 licensed haulers six have their business sited in Scott County. The hauler determines if waste is transported to the landfill, a processing facility, or to a transfer station. In the case where the waste is coming from a public entity such as a city or public schools, and if the hauler has a contract with that public entity, that waste must be delivered to a processing facility. Additional detail regarding haulers that operate in Scott County is provided in Appendix II.

There are three facilities (Specialized Environmental Technologies, Midwest Recycling Solutions, and the Shakopee Mdewakanton Sioux Community (SMSC) Organics Recovery Facility) in Scott County that collect yard waste from residents and commercial businesses. The SMSC Organics Recovery Facility also accepts food waste organics from commercial businesses and public entities such as schools.

There are several non-profit businesses in Scott County that accept different kinds of household materials for reuse. Goodwill Industries has stores in the cities of Shakopee and Savage. The Community Action Partnership (CAP) Agency, which is a partnership of Scott, Carver and Dakota Counties, hosts the location of the CAP Thrift Shop that accepts items that are in good condition. The Hands of Friendship Thrift Store in New Prague accepts donations and also operates a thrift store. USAgain has several drop-off locations in the County where they accept many kinds of textiles. Finally, Better World Books has drop-off bins in Scott County where they accept used books for redistribution.

Non-profits are not required to report to the County the amount or type of items that they collect for reuse and redistribution. This makes it difficult to determine the amount of reuse collected annually in Scott County.

There is also a process in Scott County where food that is still of good quality for consumption is reallocated to where it is needed. Second Harvest Heartland collects food that they recover from larger generators, such as grocery stores, and in turn delivers it to local area food shelves, soup kitchens, and shelters.

## **County Programs**

While the solid waste management system is largely privately operated, the County does operate five subprograms as part of its Solid Waste Management Program, through which it works to improve the system, focus on the hierarchy, and hold components of the system accountable. These subprograms include: Education and Outreach, Regulation, Incentives, Household Hazardous Waste Facility, and Coordination and Management. Efforts in place under the previous Master Plan for each subprogram are described briefly below, and as discussed in Sections 4 and 5 many of these existing efforts will continue.

The **Education and Outreach Subprogram** provides information and encourages residents, institutions and businesses to reduce, reuse and recycle solid waste. The program has efforts targeting adults and youth. Adult focused efforts consist of:

- Publication of articles and stories on solid waste and recycling in the County's bi-monthly newsletter the "SCENE".



- Offering recommendations about solid waste practices, and hazardous waste management when Environmental Services staff conducts routine hazardous waste inspections of commercial and industrial facilities. They are also informed of the opportunities for technical and financial assistance described in the next list item, and provided standardized signage if desired.
- Contracting with MN Waste Wise to reach out to businesses since 2016. Businesses that generate more than 4 c.y. per week of waste that participate in the program are reminded of their state mandated responsibility to recycling, and all participating business are provided with standardized signage for recycling, and are informed of the opportunity for financial assistance in the form of grants. Annual Reports for 2016 and 2017 regarding this effort are available on the county website at <https://www.scottcountymn.gov/1398/Business-Recycling-Grants>.
- Training and using Master Recyclers/Composters to inform the public during various events to educate residents on recycling and waste management.
- Partnering with Dem-Con's "Green-Grades" program, which in addition to youth efforts summarized below, includes attending community events with an information trailer, classroom facilities, and tours at Dem-Con's MRF.
- Outreach to institutions (i.e., schools, churches, municipalities) offering education and recycling grant opportunities.
- The County's website where information on recycling and waste management is posted.



Efforts targeting youth are important to the County because they are the future. Influencing their behavior creates social norms. These efforts include:

- Classroom programs and presentations by CLIMB Theatrical Group that targets the emotional aspects of reducing and recycling.

*Outreach efforts by Minnesota Waste Wise to businesses in Scott County resulted in 78 tons in 2016 and 22.5 tons in 2017 of additional recycling.*

- Classroom programs and presentations by Dem-Con through the Green-Grades partnership which focuses on the common messages and the practical side of teaching what is recyclable and the process of sorting recyclables at collection points.
- Outdoor Education Days event hosted by the Scott Soil and Water Conservation District where groups of eighth grade students are circulated through stations where topical experts present information on various environmental and scientific topics. One of these topics is the recycling and proper disposal of hazardous waste.

In 2017 approximately 14,000 students participated in an educational activity on solid waste management presented by Scott County and its partners.

The **Regulatory subprogram** is where the County assures businesses are operating in accordance with County ordinances. There are currently two ordinances that apply to the disposal of solid waste in Scott County: Solid Waste Disposal Ordinance No. 2 and the Hazardous Waste Management Ordinance No. 12. Both ordinances are administered by the Environmental Services Department within the Community Services Division and are available on the County website (<http://www.scottcountymn.gov/>).

The Hazardous Waste Ordinance covers the requirements for hazardous waste generators and

facilities in the County. This includes the standards for health, safety, environmental preservation, licensing elements, violations and penalties for noncompliance. Its operation and enforcement is not considered part of Solid Waste Management and is not covered further in this Master Plan. The County, however, acknowledges the hazardous waste program efforts play an important role in ensuring proper disposal and reducing the toxicity of waste that makes its way to landfills. Minimal and very small generators are inspected every 3 to 5 years, and large generators very year.

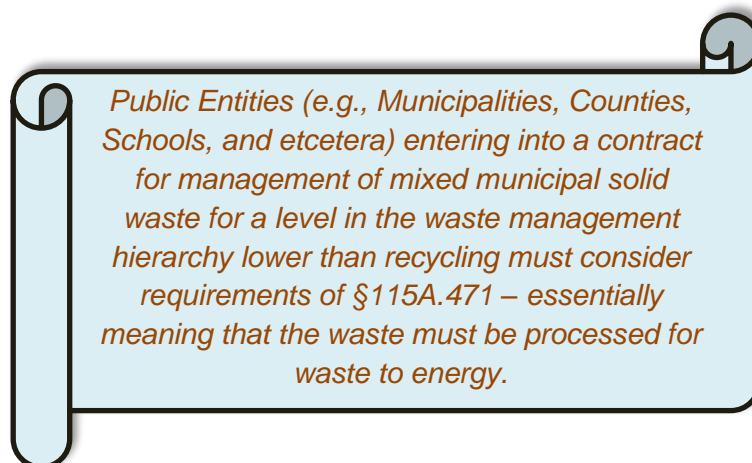
*Businesses (classified in sectors 42 to 81 under the North American Industrial Classification system) that contract for four cubic yards or more per week of solid waste collection, and Public Entities (e.g., Municipalities, Counties, Schools, etcetera) are required by Minn. Stat. §115A.151 to collect at least three recyclable materials*

The Solid Waste Ordinance deals with the provisions for licensing of solid waste facilities and haulers. Compliance with solid waste facility licenses is assured through the inspection of licensed facilities. Some facilities in the

County may also be permitted by the MPCA, depending on facility type and size. The SMSC Organics Recycling Facility is on trust land and is not licensed by the County or the State. SMSC has had conversations with the MPCA to develop a memorandum of understanding (MOU) with plans to operate their facility in accordance with the permitting requirements of the MPCA but so far no agreement has been made.

The Scott County Solid Waste Ordinance requires all haulers who collect or transport MSW to be licensed by the County. Licensed haulers are required to provide recycling service (either directly or through a written subcontract with a person or company approved by Scott County) as a condition of their license. Haulers are required to collect four broad categories of recyclable materials (that includes paper, metal, glass, and plastic) and yard waste from all single family residential homes. Haulers are also required to collect four broad categories of recyclable materials from all multiple family residential, commercial and industrial customers in Scott County. Lastly haulers are required to provide incentives to reduce waste and recycle. The county reviews hauler fee schedules annually as part of the licensing process to insure that recycling is provided at a per unit weight cost that is lower than general disposal.

Beginning in 2018, Scott County will join in a regional hauler licensing program with the other six metro counties. Haulers will only pay to be licensed in their base county where they are located and have the option to have an operator's license in the other metro counties at no additional cost.



Financial assistance to cities by the County has been ongoing for a number of years. Financial assistance to other institutions (i.e., schools, churches, etc.), was started in 2015, and to businesses in 2016. The amount of assistance has expanded each year since, and the combined effort is now considered the solid waste **Incentive Subprogram**.

Currently the Incentive Subprogram consists of the following grant opportunities:

- Since 1991, the County has provided funding to municipalities offering sub-grants for them to host annual Single Day Clean up Events. These events allow residents get rid of problem materials such as electronics, lead acid batteries, tires, appliances, scrap metal, yard waste, and recyclables. These events continue to be very popular with residents. Expenses are verified by the county and reimbursement is based on actual expenses up to an agreed on not to exceed amount currently around \$5,000 per city per year.
- Starting in 2015, the County began offering grants to institutions to either enhance or start a recycling program. Grants to businesses were added starting in 2016. This effort is complemented by the Education and Outreach subprogram with County staff taking the lead contacting and working with institutions (i.e., schools, churches, etc.), and MN Waste Wise taking the lead with businesses.



All metropolitan counties, including Scott County, were required by state law to hold quarterly Household Hazardous Waste (HHW) collections beginning July 1, 1992. In compliance with this mandate, Scott County held two annually collections from 1992 to 2000. This was the start of the Scott County (HHW) subprogram. In 2001, a permanent HHW facility opened in Scott County.

**Household Hazardous Waste Facility Operation.** The HHW facility is a popular service with growing demand (Figure 9). The volume and types of material being dropped off has increased and changed. As shown in Table 2 the weight of materials received has increased by more than a factor of five, and while there addition to accepting waste, staff at the facility work to inform the public on the consequences of improperly disposing of household hazardous waste, and on how to properly dispose of it. Finally, there have been increases in most types of materials, most of the increase is from appliances, tires, and e-waste. Due to the continually increasing number of residents coming to the HHW facility and the mounting volumes of materials, it became increasingly difficult to operate the HHW facility efficiently. In 2017, a \$1.5 million dollar expansion was finalized to better serve the

residents of Scott County. In ReUse room at the HHW facility is a popular aspect of this facility. County staff recycled 70,708 pounds of reusable household, yard, and auto related chemicals, as well as paint in 2017 (Figure 10).



Figure 9: Scott County Household Hazardous Waste Facility Participation

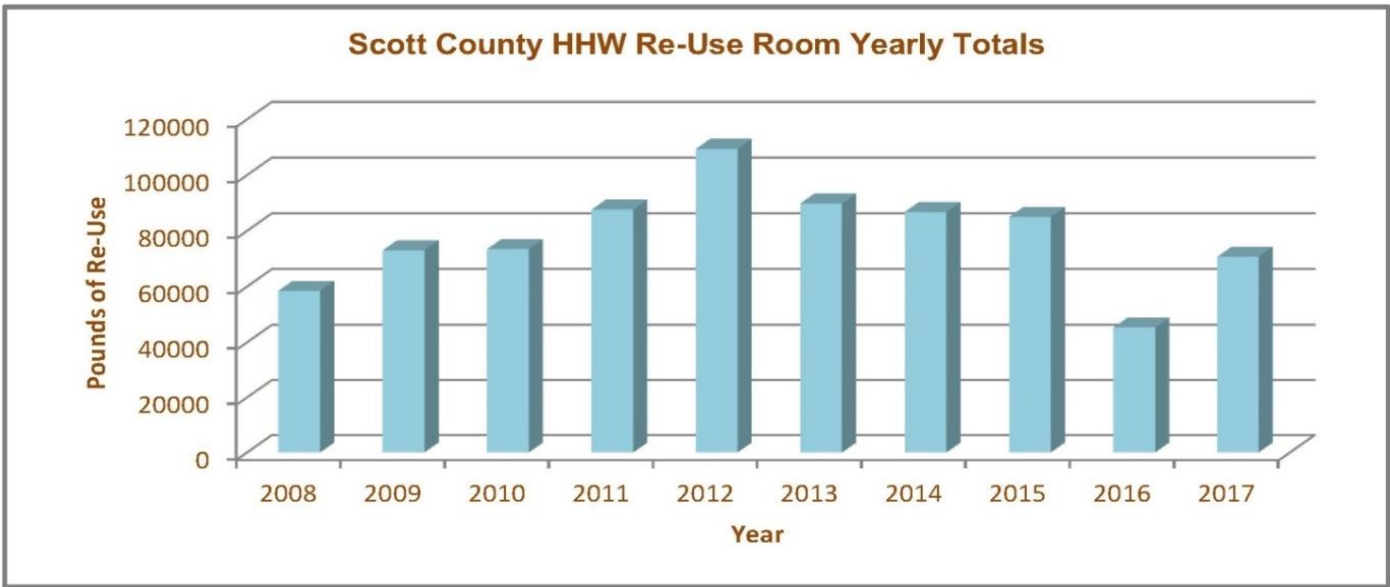


Figure 10: Scott County HHW Re-Use Room Yearly Totals

**Table 2 Weight (Tons) of Properly Disposed Household Hazardous and Problem Materials Waste Received at the Scott County HHW for Select Years**

Material	Year		
	2001	2009	2016
Electronics	0.0	47.0	163.0
Appliances	0.0	5.5	231.4
Tires	0.0	2.1	140.6
Automotive	21.5	34.3	54.9
Corrosive	0.9	0.8	5.3
Poisons	1.6.	9.5	12.9
Flammables	12.4	10.3	24.9
Oil Based Paint	42.0	15.6	46.0
Latex Paint	64.8	117.0	104.6

Operation of the various solid waste programs takes a significant amount of **Coordination and Management** both internally and externally. Externally, the County frequently interacts with many organizations and committees, and has a number of annual reporting requirements to the MPCA on the amount of waste managed in the County. The County is a member of various professional and industry solid waste groups that include Solid Waste Administrators Association (SWAA), Solid Waste Association of North America (SWANA), Association of Recycling Managers (ARM), Recycling Education Committee (REC), and Recycling Association of Minnesota (RAM) in order to stay current on the latest trends, topics, and goals in solid waste management in the Twin Cities Metropolitan Area (TCMA). Another external effort that the county completes is periodically informing other public entities of their responsibility to process waste under Minn. Stat. .§115A.471.

Internal management functions include budgeting and financial accountability, and other administrative and human resource tasks necessary to operate efficiently. Internal coordination also takes place to ensure that the County is doing its part with respect to proper solid waste management by following the hierarchy and various mandates. Internal efforts include:

- Recycling containers are located by every work station, hallway, and break room in all County facilities.

- Beginning in 2014, the County updated all the recycling containers and created new labels to better identify the many types of recyclable materials.
- The contracted hauler for the County is required to collect recyclables at all County facilities and to deliver the recyclables to a MPCA permitted facility for processing.
- The contracted hauler for the County is required to deliver all County waste to a waste processing facility and meet the requirements of Minn. Stat. § 115A.471, 473.149 and 473.803.
- In 2014, the County formed an internal Green Team committee that consists of members from many departments. Their mission is “The Scott County Green Team will do our part to protect our environment in Scott County. We are committed to increasing awareness of what it means to reduce, reuse, recycle and rethink how we can help create safe, healthy, and livable communities”.
- The Green Team organizes different events throughout the year to engage and educate employees on recycling and better waste management.

### **Financing the Solid Waste Management Program**

Funding for operating the various programs comes from a combination of:

- A Solid Waste Fee collected with property taxes - 2018 fees at \$11.50 per single family household and \$5.50 per multi-family unit
- Annual SCORE and Local Recycling Development (LRDG) grants from the state of Minnesota
- Reimbursements from programs like PaintCare and Xcel Energy Fluorescent Bulb program
- License and permit fees from regulated activities
- Drop-off fees collected at the HHW for selected items, large loads, or Very Small Quantity Generators (VSQG) of business hazardous waste.

The budget for 2018 is summarized in Table 3. In some past years, not all of the revenue received has been spent in the year received. When this occurs, unused funds from the Solid Waste Fee, SCORE and LRDG are kept in their own reserved funds for future use only for their initial or legislated purpose. As of the beginning of 2018 the balance in the SCORE fund was zero while the LRDG fund balance was a little over \$1 million.



**Table 3: 2018 Budget for the Solid Waste Program**

Item	Budget
<b>Revenue</b>	
Special Assessment	\$530,000
SCORE Grant	420,000
LRDG Grant	180,000
Fees	228,000
Reimbursements	120,000
Permits & Licenses	65,000
Donations	500
Interest Income	3,000
<b>Total Revenue</b>	<b>1,546,500</b>
<b>Expenses</b>	
Education and Outreach	180,000
Regulation	43,920
Incentives	272,000
Coordination & Management	290,000
HHW Operations	647,250
<b>Total Expenses</b>	<b>1,433,170</b>
<b>Fund Balance Set Aside</b>	<b>113,330</b>

### Future Considerations

Scott County is projected to add almost 70,000 residents by 2040 as compared to the 2010 U.S. Census (Metropolitan Council Community Profile for Scott County). Most of this growth is expected to occur in incorporated cities. The rural centers of Belle Plaine, Elko New Market, New Prague and Jordan are forecasted to have the greatest percent change over the next two decades. The three northern cities (Savage, Prior Lake and Shakopee) will have steady growth, and given their already larger size, their net gain in population will be larger than in the rural centers. Townships are projected to have smaller growth rates: with a handful projected to lose population by 2040. Scott County is projected to become even more urbanized by 2040, with nearly 88 percent of the population residing in the cities and 12 percent in the townships (Scott County 2040 Comprehensive Plan).

The pending population growth means that Scott County will not only have to meet the increasing percentage recycling goals in Table 1, it will have to do so in the face of increasing amounts of MSW. The County generated 143,268 tons of MSW in 2017, of which 54% (76,923 tons) was recycled. Using Scott County 2040 Comprehensive Plan population projections and past census numbers a population of 185,564 was estimated for 2036. Assuming the MSW per capita rates remains constant at 0.9 tons/person the projected tons of MWS generated will be roughly 167,008 tons in 2036. The seventy-five percent recycling goal in 2036 would be 118,976 tons resulting an increase of roughly 42,052 tons of recyclables in 2036 over what was recycled in 2017. This is a 55 percent increase meaning that significant additional recycling (particularly organics recovery) capacity will need to be added in Scott County and the Twin Cities Metropolitan Area. This increase translates into an additional 3,235 tons of combined recycling and organics recovery per year between 2018 and 2036.

Additional challenges and opportunities were identified by 18 stakeholders who participated in a Scenario-Based Planning Workshop lead by future iQ on behalf of Scott County. The workshop was held March 27, 2017. A report summarizing the results of the workshop is included as Appendix VI. A brief summary of major results and conclusions is provided below.

The workshop was designed to engage waste management professionals and local stakeholders in a critical dialog about the future and changing dynamics of solid waste in Scott County. It consisted of a pre-workshop survey and the workshop.

As part of the pre-workshop survey participants were asked to identify potential threats to waste management in the future, as well are opportunities. Threats identified included:

- Expanded regulations and costs as compared to subsidies and citizen interest in doing more
- Economics of recycling - demand for recycled materials and 'not in my backyard' mentality
- Resistance to change
- Loss of landfills
- Constant changes in commodity markets
- Difficulty with educating consumers and producers of waste
- Lack of feelings of environmental responsibility, and ownership and public awareness
- Not enough funds to offer assistance /affordability
- The market advantages of landfilling

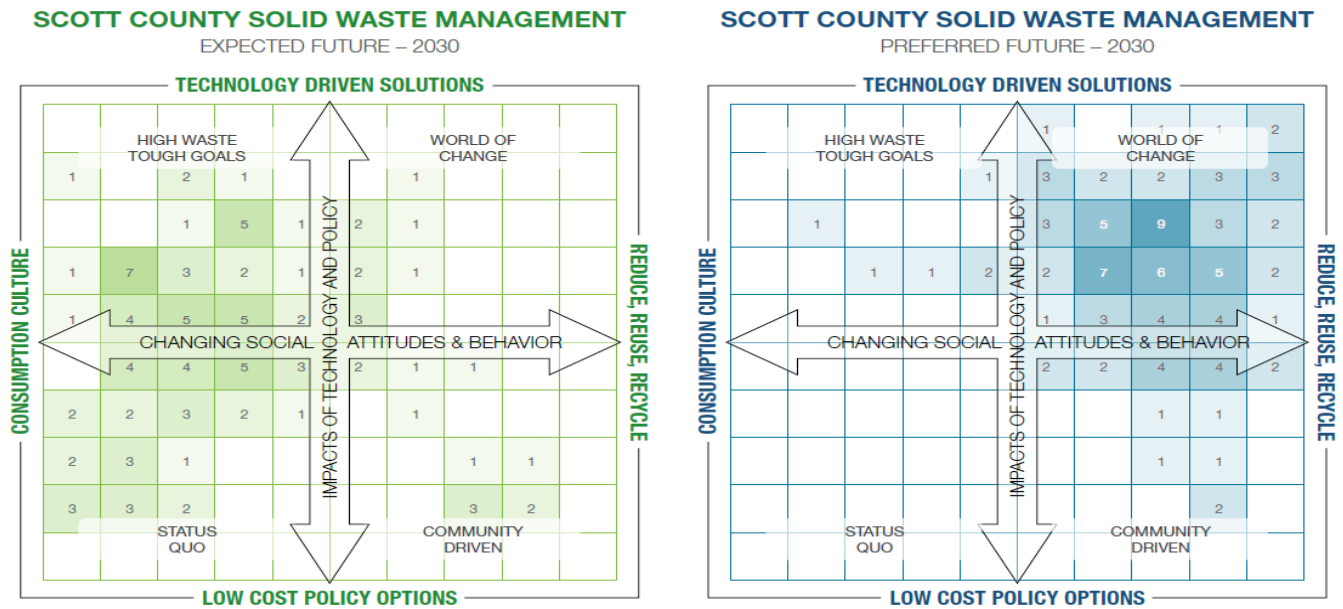
Opportunities identified for waste management in the future included:

- Education and collaboration efforts with businesses, County and towns

- Public/private partnerships
- Accumulated funds for use
- Collaboration between other counties and municipalities
- New technologies that will move waste up the hierarchy
- With population growth and more awareness of environmental issues, there is a great opportunity for increased involvement in community and care for the environment
- With decreasing homeownership and increased multi-unit complexes, there is an opportunity to offer sustainable options to a greater number of individuals

At the workshop, the identified threats and opportunities were used to explore and discuss global, regional, and local trends and forces of change in order to develop four plausible expected and preferred scenarios for the future.

The four scenarios (Figure 11) presented represent a range of conceivable outcomes for solid waste management in Scott County. Workshop participants were asked a series of questions regarding their views of the preferred and expected future. The expected future is the scenario participants deemed most likely to happen if there is no change in the current trajectory. This is shown on the left side of Figure 5. The expected future was thought to result from a consumption culture producing more waste, in combination with low regulation and some improvements in technology. It would result in maintaining the status quo and showing little or no net improvement in the management of solid waste. The Preferred Future identified by participants (right side of Figure 5) consisted of a growing collective sense of responsibility toward waste management leading to innovation and technology driven solutions.



**Figure 11: Expected and Preferred Future Scenarios Identified by Workshop Participants**

Towards the conclusion of the workshop, participants were asked to brainstorm what would be needed for this Master Plan to achieve the preferred future scenario. Three overarching needs were identified.

1. Support for technology – Policy must become supportive of these programs, perhaps by providing incentives and additional resource allocation
2. Need to provide perception of fairness<sup>1</sup> and equity (with respect to any new regulations); demonstrate benefit to residents; enable experimentation of technology
3. Behavior adjustments will be needed – Using the levers of education and economics

<sup>1</sup> Typo in future IQ report stating “firmness” instead of “fairness.”

## SECTION 2 SCOTT COUNTY GOALS AND POLICIES

Scott County's Goals, Vision and Mission, adopted by the Scott County Board of Commissioners, were incorporated into this Master Plan.

Scott County's **Goal** is to provide: *Safe, Healthy and Livable Communities*

Scott County's **Vision** is: *Where individuals, families, and businesses thrive*

- *Citizens are connected to their community, safe within their homes and confident their needs will be met*
- *People have access to quality health services and support a clean environment*
- *Communities value a range of services for citizens of all ages in learning, work, home mobility, and recreation*

Scott County's **Mission** is: *To advance safe, healthy, and livable communities through citizen-focused services*

- *Stewardship: Ensuring the responsible and stable investment of taxpayer dollars and communicating its value to the public*
- *Partnership: Aligning existing resources, volunteers and programs to achieve shared goals*
- *Leadership: Anticipating changes and managing challenges based on reliable information and citizen input*
- *Commitment: Developing a high quality workforce that is dedicated to advancing a safe, healthy and livable community*
- *Customer Service: Creating a customer experience that is respectful, responsive and solution-oriented*
- *Innovation: Exploring and adopting new technologies and processes with the goal of improving service and reducing the long term cost of service delivery*

Safe and healthy communities and a clean environment are woven throughout these statements, and an effective Master Plan is a critical part of achieving them. The County also adopts the numerical objectives in Table 1, and acknowledges the Goals and Policies included in the Policy Plan, as well as statutory waste management requirements (e.g., MN Statute § 115A.551 requires 75 percent recycling rate by 2030, MN Statute § 115A.96 Subd. 6 requires each County have a household hazardous waste management plan). This Master Plan was developed to meet the collective intent of the County, the MPCA, and the legislature.

The Policy Plan lists key strategies that are instrumental to the region for reaching the recycling goals. The MPCA expects that all counties will integrate implementation of at least some of these strategies directly into their master plans. The MPCA includes guidance on how many of the strategies should be incorporated into the master plans or identify alternatives acceptable to the MPCA, or both. Table 4 Identifies the ten key strategy or topic areas, the number of MPCA-identified strategies, and the number of strategies Twin City Metro Area (TCMA) counties need to select.

**Table 4: Policy Plan Strategies Framework (MPCA, 2017: Metropolitan Solid Waste Management Policy Plan 2016-2036)**

Topical Area	Identified Strategies	TCMA Counties Must Select
Regional Solutions	3	2
Source Reduction and Reuse	4	2
Collection Best Practices	5	1
Recycling Management	4	1
Organics Management (Food Waste, Yard Waste)	7	3
Non-Municipal Solid Waste	5	1
Recycling Markets	4	4
Organics Markets	2	1
Emerging Technologies	2	2
Product Stewardship	2	2

In selecting strategies Scott County relied on the advice of its Solid Waste Advisory Committee (described more in Section 3), and generally followed the policies listed below that define the County's position on specific issues and roles or actions that the County will generally take with respect to solid waste management. The policies are organized according to the topical areas listed under the County's Mission above.

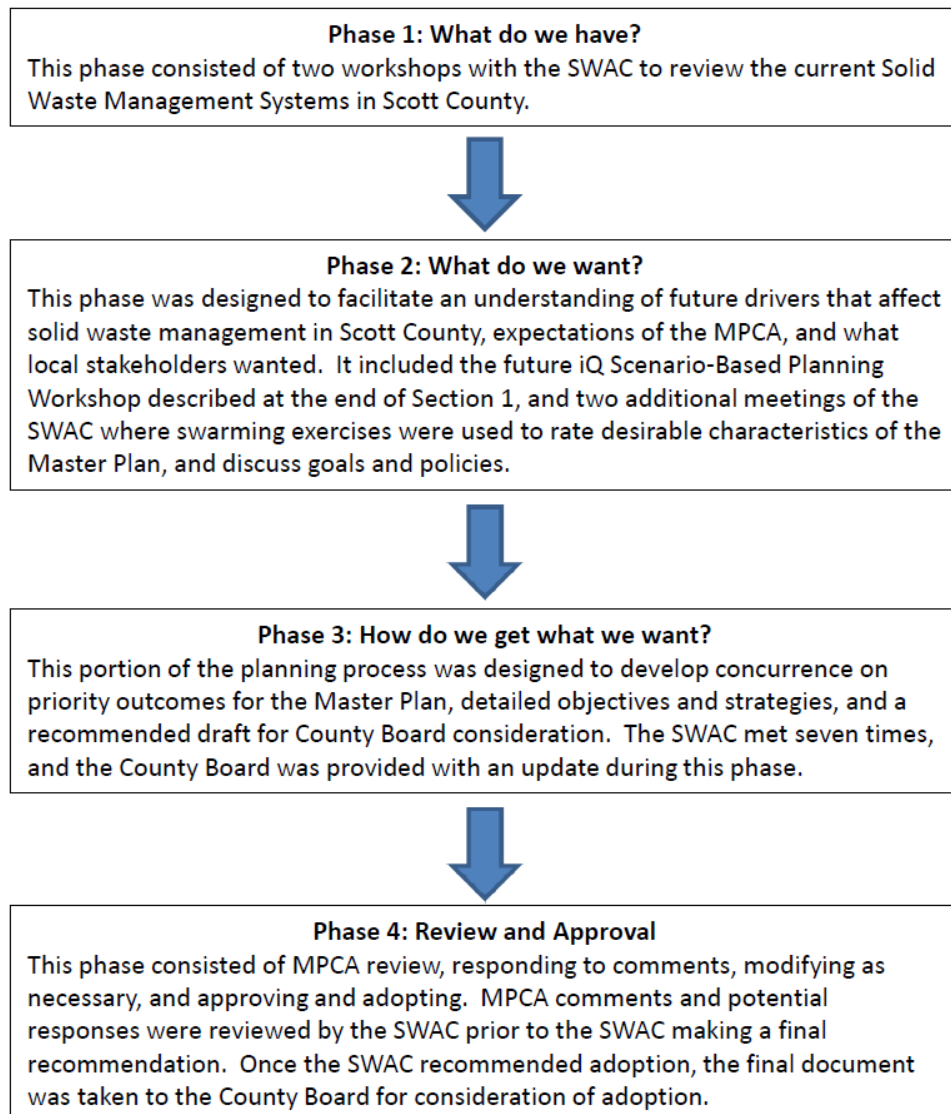
- *Stewardship*
  - Follow the hierarchy and Scott County's prioritization of waste and toxicity reduction, reuse, recycling and organics recovery/diversion (prevention, consumable food rescue for people, food scraps for livestock, food for industrial uses, and then composting) over resource recovery and land disposal.
  - Employ multiple approaches including educational, regulatory, and financial in order to efficiently and effectively meet desired outcomes.

- Seek external sources of funding to implement the Master Plan.
- Identify and invest in long term sustainable outcomes.
- *Partnership*
  - Collaborate with private and public sectors to address waste management issues.
  - Engage and enable citizens, private businesses and public institutions to manage their waste and follow the hierarchy.
- *Leadership*
  - Seek citizen input.
  - Anticipate change.
  - Collect reliable information and make informed decisions.
  - Hold all persons, including waste generators and waste system operators, accountable for proper waste management and for following the Master Plan.
  - Advocate for practical State and Federal product stewardship laws that protect, preserve, and enhance the environment and public health.
- *Innovation*
  - Provide flexibility in programs and regulations.
  - Regularly assess program effectiveness and adapt.
  - Encourage experimentation.



## SECTION 3 PLANNING PROCESS

This Master Plan was prepared with the advisement of the Scott County Solid Waste Advisory Committee (SWAC). Members of the Solid Waste Advisory Committee (Appendix IV) were appointed by the Scott County Board of Commissioners in accordance with Minnesota Statute § 473.803 subdivision 4. SWAC appointees included representatives of the public, cities and townships, the waste management industry, the Shakopee Mdewakanton Sioux Community, the Scott County Planning Commission, local business, and Scott County. An MPCA staff member was also invited to participate as an ex-officio member. The basic process used is presented in Figure 12. Meeting minutes are available on request.



**Figure 12: Planning Process**

Results of Phases 1 and 2 set the tone for an overall management philosophy and informed discussions that took place during Phase 3 where preferred strategies were selected. In particular, the future iQ Scenario-Based Planning Workshop (summarized previously at the end of Section 1 with report of the workshop included as Appendix VI) identified a preferred future and broad overarching strategic themes needed to achieve the preferred future scenario. Other important philosophical directions identified by the SWAC that significantly influenced what was ultimately recommended for inclusion in the Master Plan included.

- Recognition that the largest opportunities for growing recycling and for landfill abatement in Scott County are with organics recovery, and commercial recycling.
- That demand comes first with private side increasing capacity in response.
- However, we don't want to outstrip the capacity to handle increased recycling (traditional and organics) such that the public and business have a bad experience – if so it will be difficult to win them back.
- That the overall plan should (see minutes from the April 2017 SWAC meeting):
  - Balance county independence and regional strengths with a slight leaning toward county
  - Invest long term versus focusing on immediate returns
  - Encourage experimentation
  - Maintain status quo to only slightly increasing public funding.
- That implementation strategies should (see minutes from the April 2017 SWAC meeting):
  - Be more at the county level versus the city level
  - Include multiple means of achieving an outcome
  - Include a balance of regulatory and voluntary approaches, and
  - Balance private and public leadership roles – pretty much status quo with respect to the current partnership in the county.

## SECTION 4 STRATEGIES

This Section presents the strategies recommended by the SWAC, and adopted by Scott County for each of the ten key strategy areas identified in MPCA's Policy Plan. The MPCA expects that all counties will integrate some of the strategies included in the Policy Plan, or acceptable alternative, directly into their Master Plans. The section concludes with a description of a strategy selected by Scott County in addition to those identified by the MPCA in the Policy Plan. This new strategies are then combined with existing strategies continued from the previous county plan into the various solid waste subprograms that will be implemented by the County in Section 5. An additional subsection was also included toward the end outlining Scott County's support for resource recovery.

## Regional Solutions

Regional solutions will strengthen recycling programs by increasing region-wide standardized messaging and recycling opportunities. The MPCA Policy Plan identified three potential strategies requiring the selection of at least two, or the selection of alternative equivalent strategies. Based on recommendations from the Solid Waste Advisory Committee (SWAC) the County selected the following four strategies. Strategy 1.1 is one of the MPCA listed strategies. Strategies 1.2, 1.3, and 1.4 are variations or portions of the MPCA listed strategies. Taken together these strategies are equivalent to MPCA listed recommendations and are better tailored to the conditions in Scott County.

**Strategy 1.1: Implement standardized messaging regarding residential recycling in all seven TCMA counties.** Scott County currently supports standardized messaging by participating and promoting the Recycling Association of Minnesota (RAM) and Recycling Education Committee (REC).

RAM is an organization where members from both the public and private sector come together and provide educational and networking opportunities to improve recycling. Scott County uses RAM's label template to provide a region-wide standardize appearance to trash, recycling and organic containers in Scott County. These labels are provided to businesses that are awarded the business recycling grant. The standardized labels are also used in the County's Education and Outreach program in Scott County schools through Climb Theater productions and Dem-Con's Green Grades presentations.



REC is a multi-stakeholder committee that seeks to streamline communication, monitor updates, and disseminate information so that counties, cities, and recycling organizations are using more consistent and coordinated terms and messaging. Scott County will use REC messaging in our Education and Outreach program. The effort to increase standardized messaging will be implemented in 2018 and 2019. The provision of standardized signs to participants in the Incentive program will be determined annually based on demand and available resources.

**Strategy 1.2: Provide guidance for developers and cities to increase awareness of the need to accommodate recycling and organic collection.** Scott County will work to increase awareness of the need to accommodate recycling and organics collection with city planning staff. Scott County staff will collaborate with local haulers to prepare information, such as pamphlets, to share with cities and business on how to better accommodate recycling and organics collection with new and redevelopment. The effort to collaborate with haulers and prepare materials for city planning staff will be implemented in 2020.

**Strategy 1.3: Regional Hauler Reporting and Licensing.** Haulers have started reporting directly to the MPCA. Scott County will continue to collect its own data from haulers and business in 2018 and 2019. This information will be compared with that compiled by the MPCA and a decision will be made regarding whether to continue collecting data by 2020. In addition, Scott County will participate in the Regional Hauler Licensing Joint Powers Agreement between metropolitan area counties, if formed, and if it continues to provide value.

**Strategy 1.4: HHW Reciprocity.** Scott County currently has HHW reciprocity programs with Dakota, Le Sueur, and Carver counties; and plans to continue these agreements. These agreements provide residents of the County the ability to use the HHW facility of another. Scott County neighbors both Metro and Greater Minnesota counties. Scott County has pursued reciprocity with neighboring counties that may be in need of each other's services. Scott County is open to establishing additional reciprocity agreements.

## **Source Reduction and Reuse**

Source reduction is the most preferred waste management method in Minnesota's Waste Management Hierarchy. The MPCA Policy Plan identified four potential strategies requiring the selection of at least two, or the selection of alternative equivalent strategies. Based on recommendations from the Solid Waste Advisory Committee (SWAC) the County selected the

following three strategies. The strategy for supporting the state's Sustainable Purchasing Program was not selected, since the County does not have centralized purchasing, but the County has a Green Team that is working to encourage departments to purchase recycled content and compostable products.

**Strategy 2.1: Expand and Improve Materials Exchange Programs.** Scott County already promotes ReUSE Minnesota. However, the effort is passive and the County does not have a coordinated intentional effort for materials exchange. To improve the County will be more intentional with its Education and Outreach subprogram with respect to materials exchange. Implementation will be through the Education and Outreach subprogram described in detail in Section 5 of this Master Plan, and will include promoting MNTAP, and ReUSE Minnesota on the County website, occasionally in the County's bi-monthly newsletter the SCENE, and at the HHW Facility. Website improvements will be completed in 2018.

**Strategy 2.2: Implement a program that prevents food waste.** Scott County periodically promotes food waste prevention through the Education and Outreach program in the form of articles in the bi-monthly County newsletter the SCENE, and as a message woven into plays performed at area schools by CLIMB Theater. The County will continue these efforts, but will also improve its program by partnering with an organization, such as Second Harvest Heartland to increase the amount of food they recover from larger generators, such as grocery stores. This will likely take the form of providing funding to such organizations to increase the frequency of their collections. Discussions with Second Harvest Heartland indicate that an additional 175 Tons of food per year could be rescued by increasing food collection from existing grocery store partners from 3 to 5 times per week. The effort to increase food collections will be initiated starting in 2018. It is anticipated that the initial contract will be for two years with continuation depending on success.

**Strategy 2.3: Implement two programs that reuse at County level.** The current reuse program at the County HHW facility is very successful, see Figure 3: Scott County HHW Re-Use Room Yearly Totals. The County will continue this program. The County will also continue to look for additional opportunities at the local level. As an initial effort for a second local program the Environmental Services Program at the County will contact Families and Individuals Sharing Hope (F.I.S.H. – a network to facilitate provision of items to families in need) and ask to be added to their contact network on housing needs. When viable requests are received where we can help, we will promote them at the HHW facility and check the reuse room. This contact will be completed in 2018.

## Collection Best Practices

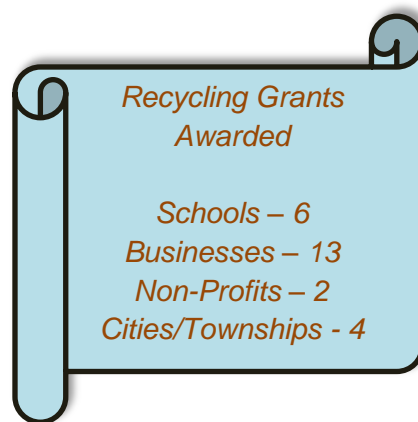
The MPCA Policy Plan identified seven strategies and required the metro counties to choose at least one, or propose alternative equivalent strategy(s) that are approved by the MPCA. A State analysis of open hauling and organized collection show that organized collection systems typically result in lower costs to consumers, have higher recycling rates, and have reduced road wear and environmental impact (noise pollution, air emissions, and fuel consumption). Two cities in Scott County (Shakopee and Jordan) have organized collection. The City of New Prague allows one hauler per 7,000 residents so currently only one hauler is serving that city. Counting the City of New Prague, means that 36% of residents in Scott County are participating in organized collection.

The rest of Scott County has open hauling, which means that residents select the hauler they want to provide garbage and recycling services. The SWAC decided that organized collection may not be the right fit for every city in the County and would be difficult logistically to require organized collection by township or the total incorporated County area. The SWAC also discussed all of the other MPCA strategy options plus an additional alternative strategy. The additional alternative strategy was to establish additional public collection sites for recyclables, yard waste, and organics. Municipal SWAC members stated that they already had public sites and discussion showed little interest for establishing additional sites.

Other MPCA strategy options were variations on the timing and bundling of collecting trash versus recycling. The SWAC was concerned that the economy for haulers was not there to make weekly collection of recycling work given the lower density of homes and businesses in the County. However, it was also acknowledged that residential recycling rates need to increase in the County to meet legislative goals, and that the strategy for collection on the same day was status quo if continued as weekly trash and bi-weekly recycling collection. This was somewhat unsatisfying with some members of the SWAC. Therefore, the SWAC elected to select the same day collection strategy, but to combine it with an aggressive outreach effort to increase the quality and quantity of residential recycling, and financial incentives to increase bin size for recyclables to accommodate additional capacity for bi-weekly collection and minimize the need for residents to put overflow into the trash bin.

**Strategy 3.1: Collect recyclables and trash on the same day.** This strategy ensures that residents put out their recycling cart on the right day for collection, the same day their hauler picks up the trash. This will eliminate confusion on what day recycling is picked up and will help prevent residents from throwing recyclables in the trash when their recycling cart is full. In 2020, the County will amend the

solid waste ordinance to require all haulers operating in the County to collect recycling and trash on the same day. Starting in 2018 the County will also complete a programmatic review and revamp its outreach effort to increase the quality and quantity of residential recycling, and redesign the Incentive subprogram to enable/encourage voluntary increases in recycling bin sizes and possibly additional recycling bins per household. It is anticipated that retooling of the Incentive subprogram may target both residents and haulers. Scott County will begin implementation of the newly designed Incentive subprogram in 2019.



### **Recycling Management Traditional & Non-Traditional**

Collection of more traditional recyclables; such as, paper, plastic, glass, and aluminum will be necessary in order to reach a 75% recycling goal by 2030. The MPCA Policy Plan identified four recycling management strategies and required metro counties to choose at least one, or propose alternative equivalent strategy(s) that are approved by the MPCA. Scott County's overall recycling rate is good; however, the County believes there is a large volume of recyclable materials generated at commercial businesses and public entities that is not being captured for recycling. Therefore, the following three strategies listed below were selected. The MPCA identified strategy to evaluate the effectiveness and impacts of mandatory upfront processing was not selected; however the County will support the MPCA efforts to evaluate this issue.

#### **Strategy 4.1: Focus implementation of mandatory commercial recycling in the metro area on generators of large quantities of recyclables and the generators of most impactful materials.**

Statute §115A.151 requires businesses that generate 4 cubic yards of trash per week to recycle at least three materials. In 2016, Scott County retained MN Waste Wise, a non-profit organization to reach out to local business and discuss opportunities to recycle and collect organics. Scott County also started providing business grants as part of the Incentive program in 2016 to support efforts to start or improve recycling collection. These efforts take several years to build relationships and awareness with local businesses and to collect enough data to determine impacts. In 2018 and 2019, Scott County will continue education and outreach to large generators with MN Waste Wise and business grants. The County will continue to request recycling data from large quantity business, but may require data from those businesses that are awarded grants. The County along with the SWAC will review the Incentive subprogram protocol and revise based on what has been learned to date.



The County will continue to inform businesses of Minnesota Statute §115A.151 via the hazardous waste program and the SCENE.

Housing in Scott County is dominated by owner-occupied (i.e., single family) units with multi-family units comprising only about 20% of the 50,000 units in the county. However, recycling participation of apartments and other forms of multi-family housing is unknown. It is suspected that it is lower compared to the single family housing section based on calls received by staff at the county, and may represent a disproportionate source for growing recycling if it can be tapped. For the purposes of recycling the county considers most forms of multi-family housing to be businesses, and as such they are eligible for technical and financial assistance through the Incentive subprogram. To expand efforts toward multi-family housing recycling with this new Master Plan the county will: 1) consider collecting additional data on the participation of multi-family housing units under strategy 11.1; and 2) have at least one year in the next six years, where the promotional efforts for business grants and technical assistance targets larger multi-family housing complexes in the county.

**Strategy 4.2: Support the collection of non-traditional recyclables such as furniture, mattresses, carpet.** Scott County's residents often struggle with how to manage their non-traditional recyclable because there are a limited number of collection programs and collection sites. The SWAC spent a considerable amount of time discussing how to increase recycling of non-traditional recyclables and decided the County should first promote private businesses that collect non-traditional items; and second promote city or County collection programs to manage waste.

There are opportunities with private businesses for residents to manage non-traditional recyclables in the metro area but information about these businesses can be difficult to locate. In 2018 and 2019, Scott County will update its website to provide better information on business that can manage non-traditional recyclables. The annual "One Day Clean Up" days provide residents an opportunity to manage non-traditional recyclables. These events are hosted by cities and the County provides grant dollars to help with disposal costs. The County will continue these grants and encourage cities to collect more non-traditional waste by increasing grant dollars to cover those costs. Starting in 2018, the County will notify the Cities in Scott County of the expanded grant opportunities and a list of "difficult to manage" materials and possible disposal options. The Scott County HHW currently accepts some non-traditional recyclables, such as tires, appliances, electronics, and scrap metal. The County has a reciprocal use agreement (RUA) with Dakota County, and through this RUA, residents have an opportunity to take additional non-traditional items to the Dakota County HHW. In late 2017,

Scott County completed an RUA with the Carver County HHW which has programs to collect non-traditional materials such as carpet and mattresses.

**Strategy 4.3: Continue efforts on compliance with the public entities recycling requirements.**

The MPCA Policy Plan listed four recommendations as part of this strategy to increase recycling by public entities. Two of the four strategies were actions for MPCA to implement. The other two were directed at counties. The first directed to counties is that “county grants awarded to public entities should be incentive-based. Grantees should be required to demonstrate measureable results.” Scott County already meets this recommendation with its grant programs requiring recipients (including public entity recipients) to track and report results.

The second county oriented recommendation is that counties should provide education and assistance to public entities on best practices for recycling. Again the county is meeting this recommendation. The County has worked with schools, cities, and other institutions providing technical assistance and grants to improve recycling. Many of the schools in Scott County have recycling in place. In 2018, Scott County will continue to partner with MN Waste Wise, to reach out and follow up with public entities on starting or improving recycling collection and offer grant opportunities. Scott County staff will continue to do outreach with schools and cities, and other public entities offering recycling grants to start or enhance recycling at their facilities.

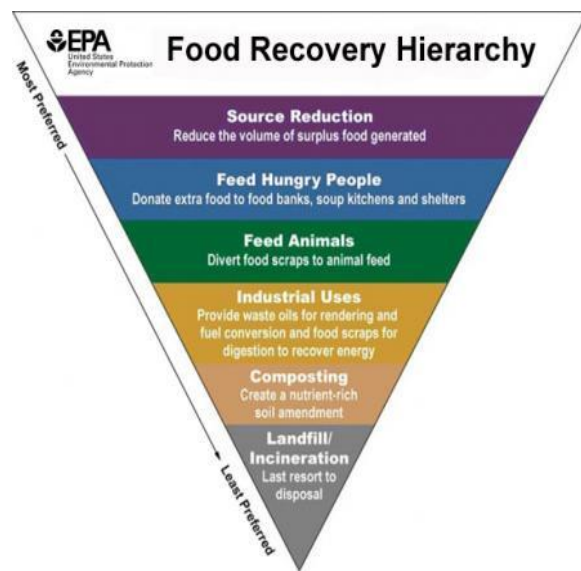
In addition to the above efforts Scott County has notified the public entities within the County that they are required to recycle at least three materials, per §115A.151. The County will continue to notify public entities of the recycling requirements of Minnesota Statute §115A.151.

**Organics Management**

The MPCA Policy Plan identified seven Organics Management strategies and required the metro counties to choose at least three, or propose alternative equivalent strategy(s) that are approved by the MPCA. Preventing and capturing a larger portion of the organic materials available in the waste stream for people, animals, and for the creation of a soil amendment is critical for the county to reach legislated recycling goals.

Following the order of preference set by the solid waste management hierarchy, the same approach will be used for organics management (Figure 13). Under the organics strategies of this Master Plan, the County will first recover food that it is still consumable. Once collected, this food can go to facilities that can redistribute it to people who are in need. After food has spoiled and can no longer be consumed by people, the next step is to capture it for another use such as composting. While there are challenges in the collection of residential organics for composting, there has been an increasing collection of organics from commercial businesses and also many schools have implemented organics separation in their cafeterias. Scott County is fortunate to have the SMSC Organics Recycling Facility that can process organics into a commercial product. However, even if food waste is collected and then composted into a salable product, markets still need to be developed so there is outlet for this material.

**Figure 13: Food Recovery Hierarchy**



So in order to reach the recycling goals on organics, Scott County will continue to educate the public on the importance of reducing organics waste going to the landfill by separating out organics from the waste stream. Scott County will focus on strategies that move organics further up the MPCA waste management hierarchy, starting with the prevention of food being wasted. The SWAC spent a considerable amount of time discussing how to increase organics diversion for composting. For a host of reasons, ranging from logistics and economics, to the potential for contamination, the SWAC prioritized efforts directed at large generators versus residential collection. Based on recommendations from the SWAC the County selected implementing Strategy 5.1, a variation of 5.2, and 5.3.

**Strategy 5.1: Promote the prevention of food waste and promote food donation.** This strategy is the same as “Strategy 2.2: Implement a program that prevents food waste” presented previously under Source Reduction and Reuse. Under this strategy, Scott County will partner with an organization such as Second Harvest Heartland to work with area grocery stores in capturing unspoiled food and deliver it to area food shelves in 2018. Following an initial two year contract the County will evaluate the

success of the effort, and may continue. The County will also continue to partner with CLIMB Theater to provide education in schools on the importance of not wasting food. Other messages will be to compost food in place of putting perishable food in the trash. The County will also continue to promote the prevention of food waste, composting, use of garbage disposals, and other acceptable alternatives in the Scott County SCENE newsletter and other venues.

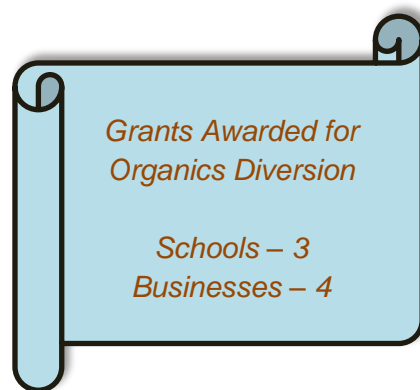
**Strategy 5.2: Make residential curbside organics collection available County-wide by 2025.**

Scott County's approach to this strategy is to build capacity with both haulers and residents during this Master Plan cycle to increase acceptance and demand for residential organics diversion and composting. This starts with gaining a better understanding of the issue and completing design of Scott County specific outreach efforts and incentives. In 2018, Scott County will collect social and economic data to better understand organics collection methods, social barriers, and perceptions of what will work best for our communities. The County does not anticipate initiating any new surveys, as there are a number of studies and surveys already available from the Twin Cities. This information will then be used by the SWAC (assuming members are willing to continue) to revise both the Education and Outreach, and the Incentive subprograms, and make ordinance changes. It is anticipated that the revised Incentive subprogram will consider items targeting both residents and haulers in addition to current efforts focused on institutions and businesses. Scott County will begin implementation of the revised subprograms in 2019.

In 2020, the Scott County Solid Waste Ordinance will be amended to require solid waste haulers to offer their residential customers an organics recovery option. This option at a minimum will need to include the ability to drop-off organics within Scott County, or the hauler may choose to offer curbside collection. What constitutes acceptable options will be further defined as part of developing the amended ordinance.

**Strategy 5.3: Require organics diversion by large generators and public entity facilities of organic material by 2022.** Businesses, such as restaurants and grocery stores, which generate large amounts of food waste, have the greatest potential to increase uncontaminated organics collection. For the past few years Scott County has worked with schools, cities, and other institutions providing grants to improve recycling, including organics diversion. In 2016, Scott County retained MN Waste Wise, a non-profit organization to reach out to local businesses and discuss opportunities to recycle and collect organics material. To complement this, Scott County also started offering grants to businesses to start or improve recycling and organic collection.

In 2018, Scott County will continue education and outreach to large generators with MN Waste Wise and the business and institutional grants to encourage them to collect organics on a volunteer basis. As discussed previously under Strategy 5.2, the County along with the SWAC will also review the Incentive subprogram and revise based on what has been learned to date. Scott County will begin implementation of the newly designed Education and Outreach and Incentive subprograms in 2019. In 2020, any hauler that is licensed to collect MSW in Scott County must offer organics collection to large generators as defined by the County and the MPCA. By 2022, large generators (both public and private) in Scott County must divert source separated organics. Changes for organic collection will require updating the Scott County Solid Waste Ordinance in 2020 regarding haulers, and again in 2022 regarding large generators.



## **Non-MSW**

In 2015, Non-municipal solid waste, which includes Industrial Solid Waste and Construction/Demolition Debris, accounted for over 68% of TCMA waste disposed of in landfills that accept TCMA waste. Historically, the TCMA generated and disposed of more MSW than other wastes streams but currently the trend has shifted to more non-MSW being disposed of in the TCMA. The MPCA Policy Plan identified five strategies and requires the metro counties to choose at least one, or propose alternative equivalent strategy(s) that are approved by the MPCA. The County selected implementing Strategy 6.1 and a variation of 6.2. The County will support MPCA led strategies 6.3, 6.4 and 6.5.

**Strategy 6.1: Ensure those projects that receive general obligation bond funding from the state of Minnesota are in compliance with the B3 guidelines.** Minnesota's B3 program (Buildings, Benchmarks, and Beyond) works with projects receiving state general obligation bond funds and requires or recommends certain standards with regards to energy and waste efficiency standards. Scott County will add this requirement to its standard contract template to ensure requirements are met on state general obligation bond funded projects starting in 2018.

**Strategy 6.2: Work with Cities to adopt ordinances that require waste plans for demolition/deconstruction projects.** Currently, Scott County and Cities within the County all require a permit for the demolition of all structures within their respective jurisdictions. The County Solid Waste Ordinance along with a demolition permit requires proper disposal of all solid waste and

prohibits the burying and burning of such waste. Scott County will work to improve the County's existing demolition permit checklist and provide Cities information on proper demolition management in 2019.

**Strategy 6.3: Study waste classification practices.** The MPCA will study the waste classification process and work to ensure a level playing field exists for all parties involved. Once complete, the MPCA will make recommendations and changes to ensure that all parties within the system understand how to properly classify the different types of solid waste. Scott County will work with the MPCA on this effort as staffing and workload allows.

**Strategy 6.4: Waste composition studies must be conducted at all disposal facilities that accept waste from the TCMA.** Currently the MPCA requires resource recovery facilities to conduct waste composition studies every five years. In the future the MPCA would like this requirement to include all landfills and waste disposal facilities for consistency. Information from these studies provides important information on waste composition trends. Scott County will work with the MPCA on this effort as staffing and workload allows.

**Strategy 6.5: Develop more comprehensive measurements of the industrial and C&D segments of the solid waste stream.** The MPCA plans to collect more data on recycling and reuse of certain material types in the industrial and construction and demolition waste streams and focus their efforts on certain materials within those waste streams, especially those with large environmental impacts. Scott County will work with the MPCA on this effort as staffing and workload allows.

## **Recycling Market Development**

Recycling market development (RMD) creates and maintains demand for recyclable materials by developing end markets for them. RMD looks at the highest and best use of post-consumer discards that are collected from the waste stream. Material that is recycled and reintroduced as a feedstock into a manufacturing process continues to generate economic activity. Focus should be on local economies, investment in new products from recycled material, materials recovery facility (MRF) new technologies, and keeping jobs and tax dollars in Minnesota. All the strategies in the MPCA Policy Plan under Traditional Recycling Markets will be MPCA-led initiatives but Scott County will participate in discussions on these strategies as staffing and workload allows.

**Strategy 7.1: Research best practices for MRF optimization.** The County will assist in any education efforts to reduce contamination at metro area MRFs. Less contamination from items like plastic bags, car parts, garden hoses, for example, that are placed in recyclables collected from residents and businesses enable the MRF to produce a cleaner product to their end markets. The County will continue to attend the Recycling Education Committee meetings that are preparing consistent messages on what goes in the recycling bin, and will commit to using products that are developed.

**Strategy 7.2: Invest in new technologies and equipment for sorting.** The County will partner with the MPCA, TCMA counties, MRFs and other partners to use the recommendations from the MRF optimization research to better inform the MPCA about grant and loan priorities. The County will also support emerging technologies with grants through its Incentive subprogram (see Strategy 9.3).

**Strategy 7.3: Expand the capacity for existing markets, specifically glass, paper, and film.** The County will work with the MPCA, TCMA, industry representatives, and recycling organizations to continue to expand existing and find new markets for recyclables. For example, the County is already working in partnership with the Scott County SWCD and area farmers to find a way to collect and recycle agriculture bag plastic.

**Strategy 7.4: Establish a shared vision to build and improve local market development infrastructure and capacity.** The County will provide support to the MPCA and other partners to insure there is adequate infrastructure to collect and process recyclables.

## **Organics Markets**

The MPCA Policy Plan requires TCMA counties to select one Organics Market strategy to support local organics markets. A solid end market for composted materials will help to drive expansion of organics programs. The SWAC selected strategies to encourage the use of compost in construction projects.

Additionally, as in other areas of recycling, organics recycling presents several opportunities for the public sector to lead by example.

Using finished compost in infrastructure projects is an opportunity that the County will explore going forward.

**Strategy 8.1: Expand the use of compost in the Minnesota Department of Transportation and in local government transportation infrastructure projects.** The County generally follows MnDOT specifications for infrastructure projects. Thus, when appropriate the County has, and will continue use MnDOT standards for compost.

**Strategy 8.2: Assist local governments in adopting policies that require the use of compost in new construction projects.** In 2018 or 2019, the County will provide a forum for local vendors of compost to engage County and municipal public works departments on the use of compost, including as an alternative to top soil in infrastructure projects.

**Strategy 8.3: Marketing Compost for Septic System Installation.** Septic systems require top soils and seeding. Top soil on single family construction sites is typically saved, but is frequently not in the greatest condition when it comes to final spreading. At least one installer in Scott County uses compost/top soil mix and county staff observations are that seed generation and initial growth on this mix is very good. County staff believes that there is the opportunity to increase the use of compost for this application. Therefore, the county is willing to provide “coupons” to try compost/top soil mixes to licensed septic system installers in Scott County. The County will also ask the MPCA and the University of Minnesota to more explicitly state that compost mixes are acceptable (or even encouraged) in their septic system installation class series.

## **Emerging Technology**

Emerging technologies, although important for the evolution of the solid waste system, prove to be a challenge both at the state level, with regards to permitting, and at the local level with regards to implementation. Because emerging technologies are important for any system to evolve and grow, these technologies will continuously need to be evaluated alongside the current solid waste systems they are enhancing or replacing to ensure the emerging technologies do not have a negative effect on human health, the environment, or the current waste system’s goals, processes, or outcomes. Emerging technologies, especially those which help increase recycling and organics recovery rates were a preferred future outcome of the Scott County SWAC when participating in the future IQ stakeholder workgroup. Scott County will actively participate with the MPCA-led initiatives listed below and work with the development and implementations of these and other technologies to help improve the solid waste system in Scott County as staffing and workloads allow. The SWAC recommends an additional strategy 9.3 to locally support emerging technology.



**Strategy 9.1: Evaluate anaerobic digestion for the region.** The MPCA along with other metro counties are currently looking into different methods of anaerobic digestion with regards to solid waste reduction, evaluating their environmental impacts, and how they

Scott County strongly encourages the MPCA to prepare to permit anaerobic digestion!

affect other waste reduction methods, such as composting, and its place in the waste hierarchy. Scott County supports the MPCA and other metro counties with their research into emerging technologies such as anaerobic digestion and will participate as staffing and workload allows.

**Strategy 9.2: Develop a process for gathering the information necessary to make timelier and consistent policy decisions by 2019.** The MPCA proposes to make policy decisions timelier and more consistent by developing a process looking at the various levels of the waste hierarchy using a life cycle perspective. Scott County supports the MPCA and its efforts to improve and expedite consistent policy decisions with regards to the solid waste program and will participate as staffing and workload allows.

**Strategy 9.3: Emerging Technology Initiative Grants.**

The SWAC recommends an additional strategy to support local haulers and facilities that invest in emerging technologies that merit for increasing recycling or organics diversion, or for improving the quality of recycling or organics. Defining this support will be part of the Incentive subprogram redesign scheduled for completion in 2018.

**Product Stewardship**

Product Stewardship is the idea that waste generated is the responsibility of the manufacturer and the consumer. The idea is that all parties involved in design, manufacture, retail and use of a product are financially and physically responsible for proper management in an environmentally sound manner at every stage of the products life. Costs associated with the generation of waste and the waste itself should be managed in the present and not left for the management by future generations. The MPCA Policy Plan suggests Counties incorporate both of the strategies below into their plans or provide alternatives that will achieve the same goals. Scott County supports product stewardship with regards to solid waste management and incorporates both MPCA Policy Plan strategies in this solid waste Master Plan. For example, the county participates in the PaintCare program with MPCA, and the Excel Energy Minnesota Recycling Program for fluorescent bulbs with respect to these items collected at the HHW facility.

**Strategy 10.1: Counties report annually on the management of priority materials for product stewardship.** The MPCA has identified many products for product stewardship and is working with counties to collect more data on how these products are currently managed. Products and materials for which the MPCA would like management data include materials such as carpet, mattresses, mercury-containing lamps, primary batteries, agricultural plastics, and plastic boat wrap. This data should also include the weights and cost associated with management and disposal within the County for these materials. Currently, Scott County has programs to collect some of the above described waste, such as mercury- containing lamps and batteries directly through our HHW facility, which we report to the MPCA. The Scott Soil and Water Conservation District in partnership with the County is also currently working with area farmers on a project to recycle agricultural plastics. Scott County will look into the collection of more priority and problem material, and will work with private businesses that also collect these wastes and report data to the MPCA if a reasonable request is received.

**Strategy 10.2: Create a regional Product Stewardship committee.** The MPCA would like to see all metro counties participate in a product stewardship committee with a focus on advancing product stewardship with regards to disposal and recycling options in the TCMA. Scott County will work with other metro counties and the MPCA by participating in a product stewardship committee as staffing and workloads allow. However, the County believes this is a state function.

### **Additional Strategies**

The following additional strategy was added by the County in addition to those requiring consideration in the MPCA Policy Plan.

**Strategy 11.1: Inventory and Data Management.** Effective management of a solid waste program requires the collection of data of recent origin and conversion of this data into information. This information then forms the basis for making informed decisions. This is particularly critical for supporting the County's approach of rapidly adapting to change. Basic data management includes developing and maintaining databases or spreadsheets to track various data collected by the County so that it is readily available for reporting and for assessing trends and producing the various performance measures adopted by the County as listed in Table 6 in Section 5. It also includes managing data acquired from new studies, inventories and assessments. The types of new studies, inventories and assessments to be completed over the course of the plan are not fully known. The list below provides some preliminary ideas. The County has the capacity to take on one or two

inventories/studies per year, may use existing studies, and may work with other counties and or cities to complete when appropriate. Inventory efforts will be determined annually as part of developing the workplan and budget for the following year.

- Residential attitudes toward recycling and organics recovery
- Business attitudes toward recycling and organics recovery
- Waste composition studies
- Rural versus urban participation in recycling
- Multi-family Housing Recycling
- Reuse opportunities, capture rates, and quantities
- HHW user characteristics, preferences and/or use barriers

### **Resource Recovery of MMSW**

Scott County will continue to implement its statutorily required responsibilities under §473.848 with respect to resource recovery (or waste to energy) and submit the annual certification report to the MPCA. With respect to strategies to ensure processing of waste and to reduce the amount of unprocessed waste the county will:

- • Implement this Master Plan; Ensure recycling is maximized at its own facilities;
- Ensure that contracts for the disposal of waste from its facilities specifies processing;
- Periodically inform other public entities of their responsibility to recycle and process waste from their facilities; and
- If a grant to a city expands significantly the county, with advice from the SWAC, will consider requiring the city to process any waste collected at Single Day Clean-Up Events that is not recycled.

### **Conclusion**

This section described the selection of various the strategies identified in the MPCA Policy Plan, or alternative equivalent strategies. Section 5 Implementation provides more details on implementation of the selected strategies, how they are combined with efforts that are continued from the previous plan to form various subprograms under Scott County's Solid Waste Management Program. Additional information in Section 5 also includes implementation schedules, accountability, and measures of success.

## **SECTION 5 IMPLEMENTATION**

This section presents how the strategies in Section 4 Strategies are combined with continuing efforts from the previous county plan into various Solid Waste subprograms, and describes how and when they will be implemented. The Section also identifies various metrics that will be used to track progress and determine when or if course corrections are necessary.

The selected strategies have been organized into subprograms that Scott County uses for reporting and fiscal management. These subprograms are: 1) Education and Outreach, 2) Regulation, 3) Incentives, 4) Coordination and Management, and 5) Household Hazardous Waste facility operations. How the various subprograms and strategies fit together under the overall Solid Waste Management Program of the County are shown in Table 5 Subprogram selected Strategy Table. Table 5 also provides an implementation schedule in Appendix I.

### **Education and Outreach**

Scott County has and continues to support a strong education and outreach subprogram because engagement with the community (public entities, residents and businesses) is necessary to increase recycling and organics collection. Scott County communities need to understand why and how to properly manage solid waste. Consistent messaging is also important. Finally, if reduce, reuse and recycling are perceived as the normal behavior, efforts to increase them will have more traction and will be more sustainable.

Scott County was involved in numerous efforts regarding education and outreach under the previous Master Plan and will continue:

- CLIMB Theater and Outdoor Education Day to outreach to area schools
- MN Waste Wise outreach to businesses
- SCENE articles outreach to residents and businesses
- Master Recyclers outreach to residents
- County website outreach to residents and businesses

**Table 5: Subprogram selected Strategies**

		SUBPROGRAMS					Continue	New
		Education and Public Outreach	Regulation	Incentives	Collaboration and Management	Household Hazardous Waste		
STRATEGIES		1	2	3	4	5		
<b>Regional Solution</b>								
Strategy 1.1:	Implement standardized messaging regarding residential recycling in all seven TCMA counties.	x			x			x
Strategy 1.2:	Provide guidance for developers and cities to increase awareness of the need to accommodate recycling and organic collection	x			x			x
Strategy 1.3:	Regional Hauler Reporting and Licensing		x		x			x
Strategy 1.4:	HHW Reciprocity				x	x	x	
<b>Source Reduction and ReUse</b>								
Strategy 2.1:	Expand and Improve Materials Exchange Programs	x						x
Strategy 2.2:	Implement a program that prevents food waste	x		x				x
Strategy 2.3:	Implement two programs that reuse at county level				x	x	x	
<b>Collection Best Practices</b>								
Strategy 3.1:	Collect recyclables and trash on the same day		x	x				x
<b>Recycling Management Traditional &amp; Non-Traditional</b>								
Strategy 4.1:	Focus the implementation of mandatory commercial recycling in the metro area on generators of large quantities of recyclables and the generators of most impactful materials	x		x				x
Strategy 4.2:	Support the collection of non-traditional recyclables such as furniture, mattresses, carpet	x		x		x	x	
Strategy 4.3:	Continue efforts on compliance with the public entities recycling requirements	x		x			x	
<b>Organics Management</b>								
Strategy 5.1:	Promote the prevention of food waste and promote food donation	x		x				x
Strategy 5.2:	Make residential curbside organics collection available county-wide by 2025		x	x				x
Strategy 5.3:	Require organics diversion by large generators and entity facilities of organic material by 2022	x	x	x				
<b>Non-MSW</b>								
Strategy 6.1:	Ensure those projects that receive general obligation bond funding from the state of Minnesota are in compliance with the B3 guidelines		x					x
Strategy 6.2:	Work with Cities to adopt ordinances that require waste plans for demolition/deconstruction Projects	x						x
Strategy 6.3:	Study waste classification practices				x			x
Strategy 6.4:	Waste composition studies must be conducted at all disposal facilities that accept waste from the TCMA				x			x
Strategy 6.5:	Develop more comprehensive measurements of the industrial and C&D segments of the solid waste stream				x			x
<b>Recycling Market Development</b>								
Strategy 7.1:	Research best practices for MRF optimization				x			x
Strategy 7.2:	Invest in new technologies and equipment for sorting			x	x			x
Strategy 7.3:	Expand the capacity for existing markets, specifically glass, paper, and film				x			x
Strategy 7.4:	Establish a shared vision to build and improve local market development infrastructure and capacity				x			x
<b>Organics Market</b>								
Strategy 8.1:	Expand the use of compost in the Minnesota Department of Transportation and in local government transportation infrastructure projects						x	
Strategy 8.2:	Assist local governments in adopting policies that require the use of compost in new construction projects				x			x
Strategy 8.3:	Marketing compost for septic system installation			x				x
<b>Emerging Technology</b>								
Strategy 9.1:	Evaluate anaerobic digestion for the region				x			x
Strategy 9.2:	Develop a process for gathering the information necessary to make timelier and consistent policy decisions by 2019				x			x
Strategy 9.3:	Emerging Technology Initiative Grants			x				x
<b>Product Stewardship</b>								
Strategy 10.1:	Counties report annually on the management of priority materials for product stewardship				x		x	
Strategy 10.2:	Create a regional Product Stewardship committee				x			x
<b>Additional County Strategies</b>								
Strategy 11.1:	Inventory and Data Management				x			x

These efforts will continue as long as they are found to provide value. Additional efforts under this Master Plan update include:

- DEM-Con Green Grades outreach to area schools and residents
- A programmatic review of this subprogram. In 2018, the County will collect and assess social and economic data to better understand social barriers, and perceptions of what will motivate Scott County communities. This will include reduce, reuse and recycling, but with an emphasis on organics recovery.
- On-going efforts to hold up community and business leaders who embrace reducing, reusing, and recycling through stories in the SCENE, the County website, and social media outlets.
- Improving the County website to be a better resource for residents seeking reuse and recycling, and materials exchange outlets. Improve pamphlets with information about demolition reuse and disposal.
- Promote consistent messaging through the outreach and incentive efforts.

## **Regulation**

Scott County ordinances regarding hauler and facility licensing and solid waste management have been in place for many years. Licensing, inspections and enforcement with respect to these ordinances will continue. New efforts added with this Master Plan include:

- Joining the Regional Hauler Licensing Joint Powers Agreement in 2018 and revising the Solid Waste Management ordinance accordingly.
- Revising the Solid Waste Management ordinance to require haulers to provide recycling and trash collection on the same day; and an organics recycling option to residents, institutions and businesses starting in 2020.
- Revising ordinances to require larger generators of organics (both public and private) to separate and recycle organics starting in 2022.

Scott County will contribute to a joint county or MPCA lead effort to develop a regional definition for large generators

## **Incentives**

The County has used incentives for years to increase recycling. Grants to cities for Single Day Clean-ups are one form that has been around for many years. This will continue under the new Master Plan, with the County being open to new ideas for improving and expanding. The County

also currently has a competitive grant effort available to institutions and businesses for recycling or organics recovery. With this Master Plan that County envisions expanding this to also include residents, haulers and innovative technologies. In 2018, the County along with the SWAC will review competitive grant efforts. The goals will be to review and improve the competitive grant effort to:

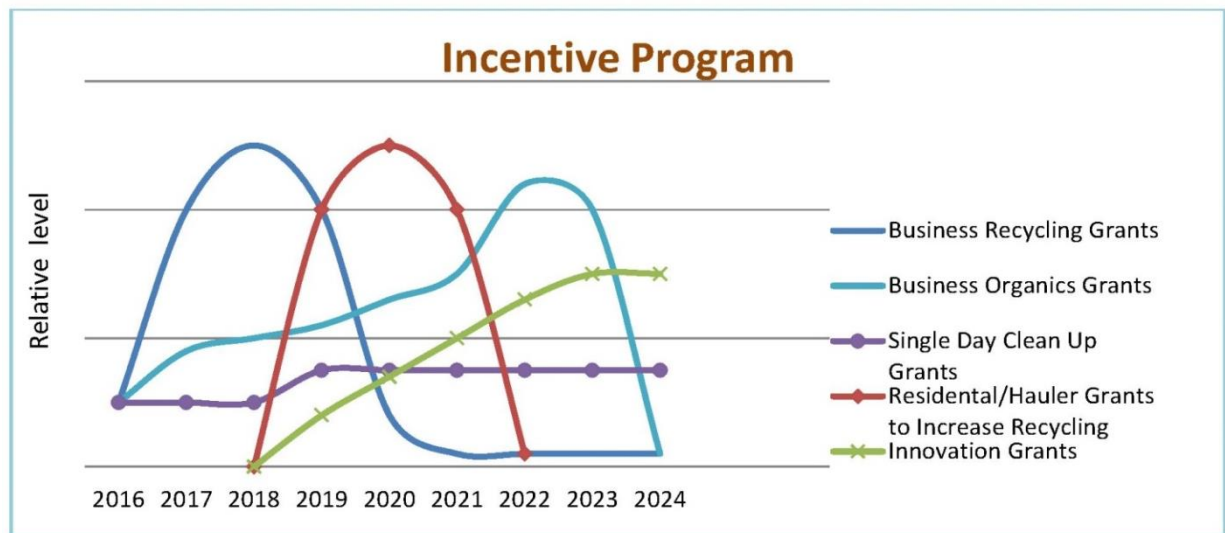
- Continue to encourage new and improved recycling and organics separation at businesses and institutions
- Encourage better sorting by residents and the use of larger bins
- Encourage haulers to incorporate additional education and outreach efforts, and consistent messaging
- Encourage the waste industry in general to innovate and use new technology

The County will engage the SWAC and MN Waste Wise to advise on the redesign, but anticipates that the amount of grant dollars dedicated to the different incentive efforts will vary. In general the County supports incentives to initiate change, but stakeholders must sustain that change, particularly if it has a regulatory basis. For example, metro businesses that generate 4 cubic yards of trash are required to recycle per §115A.151. The County supports helping businesses build the capacity to start or increase recycling, by offering the business recycling grant. However, the County anticipates walking down the dollars dedicated to the business recycling grant because ultimately business are responsible to follow the recycling law §115A.151. Other grant related expectations by the County used to maximize public investment include:

- Eligible activities are those that result in increased/new reductions, reuse, or recycling (including organics recovery) of solid waste (maintaining existing efforts are not eligible with the exception of grants to cities for the Single Day Cleanups)
- Grant recipients facilities must be located in Scott County
- Grant recipients must enter into an agreement with the County
- Grant recipients agree to provide a testimonial and serve as a “success story” if asked
- Grant recipients will be required to maintain the funded activity for a reasonable period of time
- Grant recipients agree to report both baseline pre-grant and post-grant quantities of a) materials recycled, b) food recovered, and c) trash

- Recipients of mid-sized to larger sized grants will be required to contribute a match (currently a 50% match is required for grant amount exceeding \$10,000)

A copy of the current competitive grant Instructions and Requirements is provided in Appendix V.



**Figure 14 Relative level of effort planned for Incentives**

Figure 14 provides a conceptual view of the County's vision for how financial support using grants will vary over the next six years. In general, there is a bump two years prior and two years after planned ordinance changes. The exception is financial support for Single Day Clean-Ups for which support is steady, and for innovation which is anticipated to be opportunistic.

### Collaboration and Management

Scott County currently provides fiscal and data management as part of its solid waste management efforts. It also coordinates on a regular basis with cities, neighboring counties, the MPCA, various associations, and area businesses. One of these efforts is periodically informing other public entities of recycling and waste processing responsibilities for their operations per state statutes. These efforts will continue, and with this Master Plan update the County will also:

- Participate in MPCA lead strategies when staffing and resources allow.
- Coordinate with haulers and planning departments in the County to develop and distribute guidance on the need to, and the dimensions necessary to, accommodate recycling in new and re-development.



- Forward information used to improve Scott County's information on demolition resources to cities for their use in 2019.
- Host meeting(s) with public works departments and compost producers to allow producers to showcase their product.
- Incorporate B3 requires for projects funded by State of Minnesota general obligations bond in the County's general contract template in 2018.
- Continue the County's Green Team.
- Invite the SWAC to continue in an on-going advisory capacity - meeting a couple of times each year to review progress, consider changes, and offer advice regarding budgets
- Measure progress as described below

Scott County is committed to being accountable, and to learning and adapting quickly as a means of continuous improvement. To this end the County has embraced the development of metrics around each of its subprograms. They are called Key Program Indicators (KPIs) and are generally of two types: 1) those that measure how much is being accomplished, and 2) those that reflect how effectively cumulative outcomes are being achieved. Table 6 presents both types of KPIs for the Solid Waste Management Program at the County as a whole, as well as each of the subprograms. These KPIs will be calculated annually, used by the Environmental Services Department to learn how to improve and adapt, used as input for annual budget decisions, used as information for writing education and outreach stories, and reported to the MPCA when appropriate. The recycling rate has also been adopted by the County as one of its Community Indicators and will be reported to County residents and businesses annually in the County's Public Report. Note that KPIs for the Education and Outreach Program largely measures how much is being done rather than how well. This is because education and outreach efforts support other subprograms, and the real test of effectiveness is part of the cumulative results for the other programs.

**Table 6: Annual Program Measures**

Program	How much are we doing?	How well are we doing?
Overall Solid Waste Program	<ul style="list-style-type: none"> <li>• Tons recycled, processed, and landfilled</li> </ul>	<ul style="list-style-type: none"> <li>• % recycled, processed, and landfilled</li> <li>• Tons claimed from the HHW Reuse Room</li> <li>• Tons recycled per capita</li> <li>• MSW Tons per capita</li> </ul>
Education and Outreach	<ul style="list-style-type: none"> <li>• # of elementary students reached</li> <li>• Teacher feedback forms</li> <li>• # schools participating</li> <li>• # community events</li> </ul>	<ul style="list-style-type: none"> <li>• % of schools participating</li> </ul>
Regulation	<ul style="list-style-type: none"> <li>• # of facility inspections with written warnings</li> <li>• # of written warnings for violations of ordinances</li> </ul>	<ul style="list-style-type: none"> <li>• % of inspections with written warnings</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>• # grants approved</li> <li>• Estimated tonnage of increased reuse, recycling and organics recovery</li> </ul>	<ul style="list-style-type: none"> <li>• \$/ton of increased reuse, recycling, and separation</li> </ul>
Coordination and Management	<ul style="list-style-type: none"> <li>• # of strategies initiated, maintained or completed as scheduled in Table A-1</li> </ul>	<ul style="list-style-type: none"> <li>• % of strategies initiated, maintained or completed as scheduled in Table A-1</li> </ul>
Household Hazardous Waste	<ul style="list-style-type: none"> <li>• # of participants</li> <li>• Tons of HHW, other problem materials dropped off</li> <li>• Tons claimed from the HHW Reuse Room</li> </ul>	<ul style="list-style-type: none"> <li>• Operating \$/participant</li> <li>• Operating \$/ton of HHW and problem material</li> </ul>

### Household Hazardous Waste

In 2016 and 2017, the County improved its Household Hazardous Waste facility to handle increased demand. The County will continue to operate the facility and meet its responsibilities under Minn. Stat. §115A.96. The County will adjust as necessary to meet the growing demand. The County estimates the existing facility is sufficient to meet this demand for at least the next six years with operational adjustments (i.e., being open more days or longer hours). However, the County is uncertain about meeting the demand long-term if demand continues to expand at the current rates. Thus, the County anticipates completing a future needs planning assessment over the next several years in order to prepare. The County currently has reciprocity agreements with Dakota, Le Sueur, and Carver County's and plans to continue these

agreements. The county is open to discussing and establishing additional reciprocity agreements.

Currently the County also takes other problem materials at the facility (i.e., tires, appliances, e-waste, and scrap metal) and plans to continue taking these items. However, depending on the cost of disposal the County may change its fee structure. For example, starting in 2018 the County will start charging for appliances and “larger” e-waste items. The County will consider handling other problem materials on an opportunistic basis, depending on space at the facility and disposal costs. The County will also continue to operate its reuse room. One new item with respect to HHW operation is that the County will reach out to F.I.S.H. (a network to facilitate provision of items to families in need) in 2018 to be added to their contact network on housing needs. When viable requests are received where we can help, we will promote them at the HHW facility and check the reuse room.

### **Expectations and Accountability**

With this Master Plan Scott County sets the expectations for cities (of any class), the waste industry and the county itself. These are described in Table 7. Table 7 also describes accountability for each group. In general, there is not much explicitly expected by this plan from the cities. There are two reasons for this. First, historically, and going forward Scott County’s approach was focused more on leadership by the county and the private waste industry. Continued preference for county leadership was confirmed with the SWAC as described previously in Section 3. Second, the County does not provide much financial support to the cities. The county only provides modest amounts of technical assistance and financial support when the city’s request it through the Incentive subprogram with grants to improve recycling at their facilities or grants to support Single Day Cleanup events.

With respect to the county, it will hold itself accountable to the achieving the combined recycling and organics recovery recycling rates according to the following schedule: 63 percent by the end of 2020, 68 percent by the end of 2025; 71 percent by the end of 2027, and 75 percent by the end of 2030. If the county is not meeting these outcomes, the county agrees to amend its Master Plan within six months to include additional strategies. To aid in diagnosing performance and making timely decisions the county will also annually compile the additional program measures described in Table 6.

The county also expected that the MPCA will complete its responsibilities as laid out in the Policy Plan.

**Table 7: Expectations and Accountability**

<b>Sector</b>	<b>Expectations</b>	<b>Accountability</b>
Cities	<ul style="list-style-type: none"> <li>Will voluntarily continue and consider expanding Single Day Clean Up events</li> <li>Will recycle and process waste as required by State Statutes</li> </ul>	<ul style="list-style-type: none"> <li>Will be held accountable through annual agreements with the county and by verification of expenses before reimbursement for the Single Day Clean Up events</li> </ul>
Public Entities, Commercial Businesses (sectors 42 to 81), and sports facilities	<ul style="list-style-type: none"> <li>Will recycle as required by Minn. Stat. §115A.151</li> </ul>	<ul style="list-style-type: none"> <li>If financial assistance is provided by the county they must enter into an agreement with the county to maintain and report on the improvements for a specified period of time.</li> </ul>
Large Generators (public and Private) of Organics	<ul style="list-style-type: none"> <li>Will start recycling source separated organics in 2022</li> </ul>	<ul style="list-style-type: none"> <li>Will be held accountable to county ordinances</li> </ul>
Haulers	<ul style="list-style-type: none"> <li>Will follow licensing protocol and requirements, and report as required</li> <li>Will follow county ordinances</li> <li>Will offer an option for organics starting in 2020</li> </ul>	<ul style="list-style-type: none"> <li>Will be held accountable to county ordinances</li> </ul>
Waste Management Facilities	<ul style="list-style-type: none"> <li>Will follow county ordinances</li> </ul>	<ul style="list-style-type: none"> <li>Will be held accountable to county ordinances</li> </ul>
Scott County	<ul style="list-style-type: none"> <li>Will implement this Plan</li> <li>Will complete inspections and enforce ordinances</li> <li>Will provide technical and financial assistance</li> <li>Will track metrics in Table 6</li> <li>Will adapt and change as necessary to achieve recycling and organics recovery outcomes</li> <li>Will complete annual reports to the state</li> </ul>	<ul style="list-style-type: none"> <li>Will adapt and amend Master Plan and stay on track with achieving combined recycling and organics recovery rates of 63% by the end of 2020, 68% by the end of 2025, 71% by the end of 2027, and 75% by the end of 2030.*</li> </ul>

\*Scott County maintains the right to adjust if the outcomes are modified by the state or the legislature.

## Financing Implementation of the Plan

Revenue for financing solid waste management by the county is derived from:

- A Solid Waste Special Assessment fee by the county on residential properties,
- SCORE and LRDG grants from the State,
- Fees collected at the HHW,
- Reimbursements from PaintCare and the Xcel Energy Fluorescent Bulb programs,
- Licenses and permits,
- Donations, and
- Interest from dedicated fund balances.

In combination, it is estimated that these will raise about \$1.5 million revenue in 2018. Expenses in 2018 are estimated at \$1.4 million such that roughly \$100,000 will be added to fund balances (Table 3). Financial modeling leading up to final approval of the 2018 budget, however, was showing that the solid waste program overall was likely to end 2018 in the debit by about \$80,000 given estimated expenses. This deficit cannot be covered by the state grants. Thus, as part of the 2018 final budget and fee approval process the County Board elected to start charging a fee for electronic waste and appliances dropped off at the HHW. This was done because the annual rate of growth at the HHW for these problem materials is 23%. The rate of growth of the special assessment fee is the rate of growth of housing which is only 1.4%. The result was a rapidly widening gap between the cost of disposing of these problem materials and growth in revenue. Charging for e-waste and appliances is estimated to generate \$200,000 in additional fees collected at the HHW in 2018, and some fund balance set aside as described above. By increasing fees for dropping off the materials at the HHW this revenue stream will increase, or decrease, with any changes over time in the amount of these problem materials being dropped off – in other words it's self-correcting to whatever the future trend might be.

The county has not been spending the LRDG grant every year. Amounts not spent are saved and accumulated in a dedicated fund. The county is planning to use these funds to the extent possible to fund eligible portions of this Master Plan. However, LRDG funds are for “planning, developing, and operating yard waste composting and recycling programs”, are required to be matched by equal county expenditures; and can only be used for new or expanded efforts, or for maintaining municipal recycling efforts. Thus, it cannot be used for efforts targeting reducing and reusing at the top of the hierarchy, or for increasing the processing of waste. The county's

concept is to use the LRDG funds and required match to finance the described expansion of the Incentives subprogram. Hopefully, the County will be able to get a legislative change enabling “local” funds to be used for match rather than exclusively “county expenditures.” The county believes this will not only allow expansion of efforts to implement the incentives, but will also broaden the base of financial support for solid waste management in the County to include other private and public partners. Having others partners financially vested in outcomes will also benefit the waste management system making it more sustainable over the long term. If legislative change is not successful the County will set up the incentives program to have all expenses be County expenditures, with partners then reimbursing the county for their portions. This is less efficient meaning that the County will have an expanded administrative and project management role for all efforts enabled through the LRDG program.

One other consideration is that the county will lose some revenue by joining the regional licensing JPA. This loss is relatively minor, estimated between \$10,000 and \$20,000 annually, and the benefit to local business partners outweighs the loss.

In conclusion just keeping up with the demand at the HHW is consuming much of the financial capacity the County has available locally for solid waste management, and there is a limited ability to use existing State grants to expand efforts either because they are already being consumed or because of eligibility or matching fund requirements. The bottom line is that without additional assistance from the State or the ability to bring in more partners, the County may need to raise the Solid Waste Special Assessment fee to implement this Master Plan. Raising local taxes and the Solid Waste Special Assessment fees, however, will be a last resort.

### **Effect on Business**

One of the State requirements for Master Plans is that they “must contain criteria and standards to protect comparable private and public facilities in the area from displacement; “unless the displacement is needed to achieve the objectives of the plan.” As stated previously, solid waste management in Scott County has largely been privately led. The only facility the County operates with respect to solid waste is the HHW facility. This Master Plan does not change the County’s intent with respect to operating public facilities. Thus, the County does not have or need such criteria or standards. The County acknowledges that in the past, by accepting some problem materials such as e-waste and appliances for free at the HHW, it has created a situation where private partners could not complete. This, however, was ended in 2018 with the County

starting to charge a fee for these items. The County's hopes over the long term that the private side will now be able to take on the bulk of the effort for handling these items, such that the County can then refocus on its mission of handling household hazardous waste at its facility.

This Master Plan, however, does have some new expectations for the waste industry, businesses and public institutions in Scott County. For the waste industry, there is an expectation that it will respond with increased capacity for recycling and organics processing/composting. Haulers will be required to provide same day collection of trash and recycling and offer an organics diversion option in the county starting in 2020. Same day collection is already the normal business procedure. However, the county anticipates combining this with an outreach effort to increase residential curbside recycling and is hoping to partner with haulers on the outreach effort, and on the provision of larger recycling bins. For organics diversion it is optional whether the hauler offers curbside collection, a drop-off site, or partners with another business to offer convenient drop-off site(s).

Larger generators, both public and private, of organics will be required to start separating or diverting organics starting in 2022. The County acknowledges this will be an additional effort for many. However, since 2016 businesses that generate over 4 cubic yards of MSW have been required to collect at least three recyclable materials and organics can be one of those materials. In addition, it is the County's experience that many of the institutions and business who have accepted grants to start diverting organics from the county over the past few years have reduced their trash bill because recyclables (including organics) have significantly lower taxes applied. Finally, the county anticipates ramping up its financial assistance/grants for organics around the same time this requirement kicks in.

### **Closing the Circle**

Phase 2: of the process used to develop this Master Plan was titled "What Do We Want? "; and the SWAC spent a significant amount of time discussing the needs of Scott County. The Scenario Based Planning Workshop in particular identified a "preferred future" based on new technologies and a collective sense of responsibility. Workshop also identified three overarching needs for the Master Plan to achieve the preferred future scenario. Table 7 provides a summary comparison of these themes with key characteristics of this Master Plan.

**Table 7: Preferred Future Needs and the Master Plan**

Identified Need	Corresponding Master Plan Elements
<b>Support for technology – Policy must become supportive of these programs, perhaps by providing incentives and additional resource allocation</b>	<ul style="list-style-type: none"> <li>Strategies 7.2 Invest in new technologies and equipment for sorting, and Strategy 9:3 Emerging Technology Initiative Grants provide additional resource allocation for new and emerging technologies.</li> <li>Scott County strongly encourages MPCA to prepare to permit anaerobic digestion and will participate in MPCA lead Strategy 9.1: Evaluate anaerobic digestion for the region.</li> <li>Scott County will support the MPCA and its efforts to improve and expedite consistent policy decisions under Strategy 9.2.</li> </ul>
<b>Provide perception of fairness and equity; demonstrate benefits to residents, enable experimentation of technology</b>	<ul style="list-style-type: none"> <li>Both private and public entities meeting the definition of larger generator will need to start diverting organics in 2022.</li> <li>Scott County invites the SWAC members back to the Table to help design it's Education and Outreach, and Incentives Subprograms.</li> <li>A redesigned Education and Outreach Subprogram will begin in 2019, with a continued use of "success stories."</li> <li>An Innovative grant is added to the Incentives Subprogram.</li> </ul>
<b>Behavior adjustments will be needed – Using the levers of education and economics</b>	<ul style="list-style-type: none"> <li>Strong emphasis on education and outreach will continue.</li> <li>Redesign of the Education and Outreach Subprogram will be completed in 2018 with redesigned effort beginning in 2019.</li> <li>The redesign effort will be inclusive of others including SWAC members.</li> <li>Strategies are adopted for regional messaging, and both recycling and organics market development.</li> <li>Incentives Subprogram grants expanded to encourage haulers to partner with the County education and outreach to their customers.</li> <li>Incentives Subprograms grants expanded to include consideration of technologies for producing less contaminated recycling and organics materials products.</li> </ul>



## APPENDIX I STRATEGY IMPLEMENTATION SCHEDULE

### Table A-1: Strategy Implementation Schedule

SWMP Strategy Implementation Timeline	Program participants	2018	2019	2020	2021	2022	2023
<b>Regional Solutions</b>							
<b>1.1 Implement standardized messaging</b>							
Promote REC and RAM	County, REC	X	X				
Business Grants/Waste Wise	County, Waste Wise, Businesses	X	X				
Dem-Con Green Grades	County, Dem-Con	X	X				
CLIMB Theater	County, CLIMB	X	X				
<b>1.2 Provide guidance for developers/cities to accommodate recycling and organics</b>							
Collaborate with Haulers and prepare guidance pamphlets	County, Hauler			X			
<b>1.3 Regional hauler reporting and licensing</b>							
Regional Hauler Licensing Joint Powers Agreement	Counties	X					
<b>1.4 HHW reciprocity</b>							
Establish and continue HHW reciprocity with neighboring Counties	Counties						
<b>Source Reduction and REUSE</b>							
<b>2.1 Expand and improve material exchange</b>							
Promote MNTAP and ReUSE Minnesota	County	X					
<b>2.2 Implement a program that prevents food waste</b>							
Second Harvest Heartland	County, Second Harvest Heartland	X	X				
CLIMB Theater	County, CLIMB		X				
SCENE	County						
<b>2.3 Implement two trograms that reuse at County level</b>							
HHW REUSE ROOM	County						
Families and Individual Sharing Hope FISH	County	X					
<b>Collection Best Practices</b>							
<b>3.1 Collect recyclable and trash on the same day</b>							

Implement incentive/grant program to increase quality and quantity of residential recycling (bins)	County, Businesses		X				
County will amend Ordinance to require haulers to collect recycling and trash on the same day	County, Haulers			X			
<b>Recycling Management Traditional and Non Traditional</b>							
<b>4.1 Implement mandatory commercial recycling on large quantity generators</b>							
Business Recycling Grants/Waste Wise	County, Waste Wise, Businesses	X	X				
SCENE	County						
<b>4.2 Support collection of non-traditional recyclables</b>							
Improve website for proper disposal options	County	X	X				
City One Day Clean Up Grants	County, Cities						
Collect non-traditional recyclables at HHWs	County						
<b>4.3 Continue efforts on compliance with public entities recycling requirement</b>							
Business Grants/Waste Wise	County	X					
<b>Organics Management</b>							
<b>5.1 Promote the prevention of food waste and donation</b>							
Second Harvest Heartland	County, Second Harvest Heartland	X	X				
CLIMB Theater - plays on food waste prevention	County, CLIMB		X				
SCENE	County						
<b>5.2 Residential curbside organic collection available County-wide by 2025</b>							
Implement incentive/grant program to increase residential organic collection	County		X				
County will amend Ordinance to require haulers to offer a residential organic program	County, Haulers			X			
<b>5.3 Require organic diversion by large generators and entity facilities of organic material by 2022</b>							
Business Grants/Waste Wise	County, Businesses	X					
Haulers must offer organic collection to larger generators	Hauler			X			
Large generators must divert source separated organics	Businesses					X	

<b>Non-MSW</b>							
<b>6.1 Ensure compliance with B3 guidelines</b>							
County will add requirements to standard contract template	County	X					
<b>6.2 Work with cities to adopt ordinances that require a waste plan for demo projects</b>							
Improve demolition permit checklist and provide cities with proper demo management information	County		X				
<b>6.3 Study waste classification practices</b>							
Scott County will support MPCA waste study classifications	MPCA						
<b>6.4 Waste composition studies must be conducted at all disposal facilities that accept waste from TCMA</b>							
Scott County will support MPCA waste composition studies	MPCA						
<b>6.5 Develop more comprehensive measurements of the industrial and C&amp;D segments of the solid waste stream</b>							
Scott County will support MPCA development of industrial and C&D measurements	MPCA						
<b>Recycling Market Development</b>							
<b>7.1 Research best practices for MRF optimization</b>							
Assist in education efforts to reduce contamination at metro area MRFs	MPCA, County						
<b>7.2 Invest in new technologies and equipment for sorting</b>							
Support MRF optimization research to inform MPCA grant and loan priorities	MPCA, County						
Implement local Incentive/Grant program that supports new technology and sorting equipment	County, Businesses		X				
<b>7.3 Expand the capacity for existing markets, specifically glass, paper, and film</b>							
Work with MPCA, TCMA, industry, and recycling organizations to coordinate the collection of quality material	MPCA						
Partner with SWCD on Ag Plastic collection	County, SWCD						
<b>7.4 Establish a shared vision to build and improve local market development infrastructure and capacity</b>							
County will support MPCA to collect and process recyclables	MPCA						
<b>Organics Market</b>							

<b>8.1 Expand the use of compost in MNDOT and local government transportation projects</b>							
County will use MNDOT standard for compost when appropriate	MPCA, MNDOT, County						
<b>8.2 Assist local government in adopting policies that require the use of compost in new construction projects</b>							
County will provide forum for local vendors of compost to engage County and municipal public work departments	County, Cities, Industry		X				
<b>8.3 Marketing Compost for Septic System Installation</b>							
Provide septic installers incentive to try compost.	County, Industry		X				
Contact the MPCA septic staff and U of M Extension and discuss promoting compost for top soil cover	County, MPCA, UofM Extension		X				
<b>Emerging Technology</b>							
<b>9.1 Evaluate anaerobic digestion for the region</b>							
Scott County will support MPCA research into emerging technologies	MPCA						
<b>9.2 Develop a process for gathering information necessary to make timelier and consistent policy decision by 2019</b>							
Scott County will support MPCA	MPCA						
<b>9.3 Support emerging technology</b>							
Implement local incentive/grant program to support emerging technology	Businesses		X				
<b>Product Stewardship</b>							
<b>10.1 Counties report annually on the management of priority materials for product stewardship</b>							
Report to MPCA on the management of priority materials	MPCA, County						
<b>10.2 Create a regional Product Stewardship committee</b>							
Scott County will participate in Product Stewardship committee	MPCA, TCMA						
<b>County Additional Strategies</b>							
<b>11.1 Inventory and Data Management</b>							
Data management for assessing trends and performance measures	County		X				

## **APPENDIX II: EXISTING SOLID WASTE MANAGEMENT SYSTEM DESCRIPTION**

### **Waste Management Systems and County Programs**

This appendix augments the summary provided in Section 1 regarding the existing waste management roles and responsibilities, demographics, waste projections and composition, waste amounts and management methods, facilities, and Scott County's programs and activities.

### **Waste Management Governance, Roles, and Responsibilities**

The State, County, Municipalities, Waste Industry, Publics Entities, and Generators (Business and Residents) all have roles in implementing solid waste policies and operating waste management system and ensuring that public health, natural resources, and the environment are adequately protected.

The Solid Waste Management requires coordination among the following groups:

**State** – Minnesota Pollution Control Agency (MPCA): The MPCA regulates solid waste facilities and sets solid waste policy through the Policy Plan to meet goals and requirements prescribed in State law. The Policy Plan establishes the framework for TCMA counties to follow in their County Master Plans. The MPCA also distributes State funding to TCMA counties for solid waste abatement activities.

**County:** In accordance with State law (Minn. Stat. §§115A and 473), county governments play the primary role in planning, implementing, and maintaining solid waste programs for proper management of waste generated within their respective jurisdictions. Scott County collaborates with the state, public entities, residents, businesses, community groups, and the waste industry toward meeting state goals. Scott County licenses and regulates haulers and facilities for collection, management, and related services and does not own or operate waste management facilities besides the Scott County Household Hazardous Waste Facility (HHW).

**Municipalities (Cities and Townships):** Scott County works with the Cities and Townships within the county to provide resources and technical support with regards to solid waste management and provides grants to assist local municipalities with Single Day Cleanup events yearly. The County also provides programs to assist local communities with recycling and composting. Scott County does not mandate organized collection. Each City and Township selects the most appropriate solid waste system that best fits their needs. The cities also license and fee the solid waste haulers within their City.

**Public Entities:** State laws hold public entities, including counties, cities, townships, and public schools to a higher standard in managing their waste, including recycling and resource recovery mandates. Public entities are responsible for carrying out proper waste reduction,

recycling, and disposal activities as part of business operations. Public entities are required by statute to recycle a minimum of three materials and deliver remaining trash to a resource recovery facility with available capacity.

**Waste Industry (Private Sector):** For decades, State law has included a preference for the private-sector management of waste and operation of waste facilities. Scott County relies on the private sector for waste management services. The private sector is primarily responsible for the collection, processing, and brokering of waste and materials. The private sector establishes fees for these services.

**Waste Generators (Residents, Businesses, and Organizations):** Residents, businesses and organizations generate waste either as private individuals or as contributors to business, industrial, construction, or demolition activities. Waste management choices reflect various influences and situations, including having the opportunity for waste management options, cost, knowledge, and responsibility. Residents and businesses drive the amount of waste that is generated and discarded, and thus needs to be managed.

## **Scott County Demographics**

With a population of 142,436, as estimated by the Metropolitan Council for 2016 (Metropolitan Council Community Profile for Scott County, 2016), Scott County remains Minnesota's ninth most populous County and sixth out of the seventh most populous metro county. This figure is expected to increase to nearly 200,000 persons by the year 2040, (Scott County 2040 Comprehensive Plan). From 2010 to 2015, Scott County's growth rate of 9 percent was the highest in the metropolitan and neighboring areas (Scott County 2040 Comprehensive Plan). Overall, the proportion of "township" and "city" residents remained steady during the 1960s and 70s, with roughly 40 percent of the total population living in townships and 60 percent in cities. During the 1980s, the county experienced accelerated growth in the cities, a trend that continued into the 2000s. By 2010, less than 20 percent of the county's population lived in a township and 83 percent lived in one of the cities. The gap between township and city residents is forecasted to widen even further by 2040 (Scott County 2040 Comprehensive Plan). As the County's population grows, increased waste generation will place additional stress on the waste management system, requiring an aggressive focus on waste reduction and reuse.

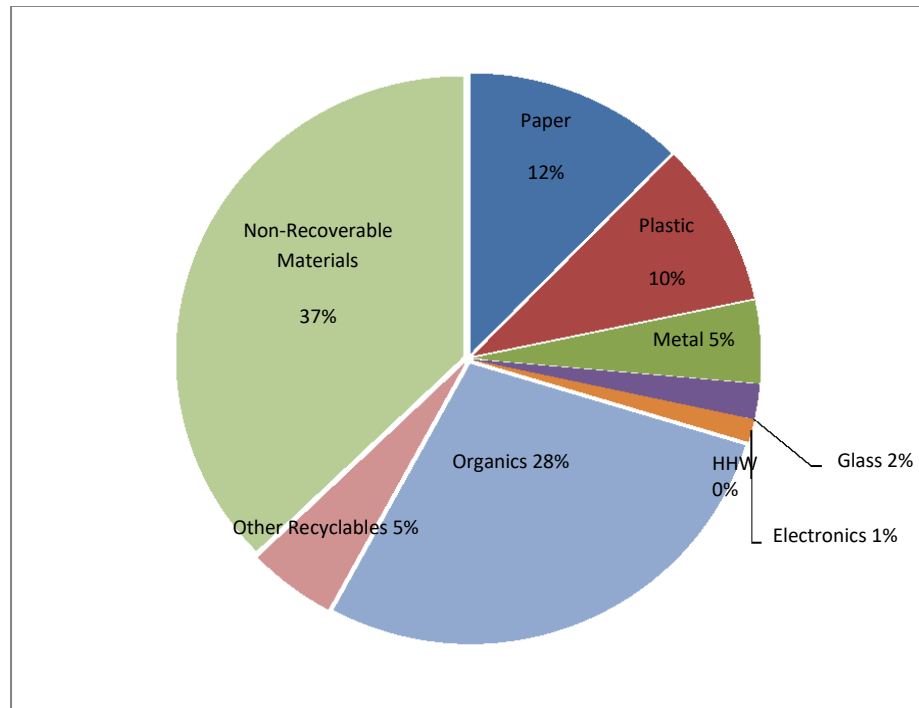
## **Demographic Summary** (Metropolitan Council Community Profile for Scott County, 2016)

<b>Land area:</b>	369 square miles
<b>Land Use:</b>	69% Agriculture and Undeveloped
	12% Residential
	8% Parks and Recreation
	5% Open Water
	2% Industrial
	1% Commercial
<b>Median age:</b>	37.8 years, a slight increase over the 2010 Census
<b>Populations of Color:</b>	17.13 percent
<b>Total households:</b>	48,789
<b>Median annual household income:</b>	\$90,200

The Twin Cities Metro Area (TCMA) Counties are held to higher standards by the State of Minnesota with regards to Solid Waste Management. But it is also important to look at how Scott County differs from the TCMA with regards to population and land use area. With a TCMA total population of 3.04 million in 2016, as reported by the Metropolitan Council, Scott County, with a population of 142,436, has only 4.7% of the TCMA's population even though it consists of 12.4% of the TCMA's land area. This difference in land area means Scott County has a 386 people per square mile population density average compared to the TCMA's 1022 people per square mile. (Metropolitan Council Community Profile for Scott County, 2016) Differences like these can have a tremendous effect on the Solid Waste System as curbside collection in rural, less densely populated areas like our non-TCMA neighboring counties have come to deal with.

## **Composition of Municipal Solid Waste**

The MPCA conducted a statewide waste characterization study in 2013 to assist the MPCA and local governments with planning efforts for managing municipal solid waste. The largest segments of the statewide mixed municipal solid waste stream were found to be organics and paper. The study also identified potential diversion opportunities based on the largest quantities of recoverable materials found in the waste stream, including organic waste, paper, and plastic. Waste Composition can be seen in Figure A-1.



**Figure A-1: TCMA MSW composition, 2013**

### **Solid Waste Tracking and Reporting in Scott County**

This section looks at the amount of waste generated in the County from residents, businesses and public entities over time and how it has been managed; and how Scott County tracks the amount of waste managed through recycling, organics recovery, resource recovery, and land disposal from Hauler reports due to the county at the beginning of each year.

The amount of MSW managed is calculated from data reported by licensed organics and recycling facilities, MSW landfills, and resource recovery facilities, and is dependent on the waste hauler properly claiming county-of-origin at the time the waste is delivered to the respective facility.

### **County, haulers, and solid waste facilities reporting:**

All counties in the TCMA are required to submit an annual Certification Report to the MPCA as required by Minnesota statute § 473.848, Subd. 2. This report informs the MPCA on whether the County has certified any MSW generated in Scott County as non-processible before being delivered to a landfill. This certification report to the State describes the progress made by the County to reduce the amount of un-processed waste generated.

In addition to the Certification Report, the County is required to annually submit the SCORE Report that consists of several components. The SCORE Report contains the total amount of MSW that was



recycled, landfilled, and processed. This data is used to calculate the County's annual recycling rate. The County is also required to submit an annual LRD grant application from the State. In addition, the County is required to submit a solid waste management work plan for the upcoming year and a solid waste management master plan annual report that describes how the County is meeting the goals outlined in the County's Master Plan.

As per the County Solid Waste Ordinance #2, all haulers and solid waste facilities are required to submit an annual report to the Scott County. Beginning in 2016 all haulers were required to annually report the amounts of recycling and MSW they collected to the State. Haulers also need to report the facilities where the waste and recyclables were delivered. Solid waste facilities have been required to report to the State since the solid waste rules were first adopted which has been over 20 years ago.

### **Existing Haulers, Facilities, and collection programs in the County**

This section lists private and public solid waste facilities in Scott County. Most Facilities provide more than one service or serve more than one function in the resource recovery facilities or MSW land disposal facilities located in Scott County. Table A-2 shows where most Solid Waste Facilities located and operating in Scott County. Scott County is the most Southwestern TCMA County and shares much of its borders with non-metro Counties. Table A-3 shows the solid waste facilities in Scott County and their function. Table A-4 lists Scott County Solid Waste Facilities and Waste Drop-Off locations with regards to accepted material and prices or fees charged if reported or available online as of April 2018.

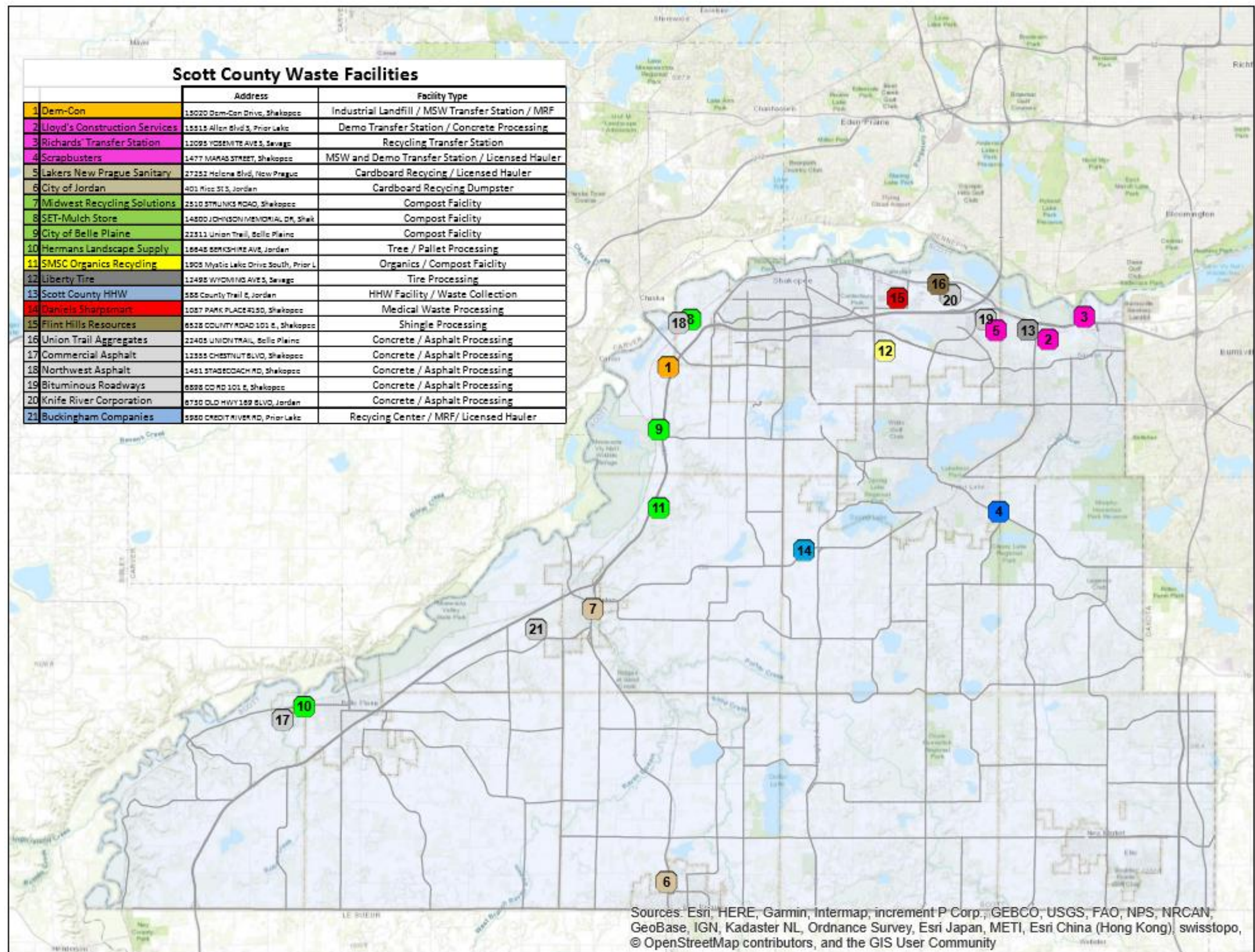


Table A-2: Scott County Waste Facility Locations

Table A-3: Scott County Solid Waste Facilities and their Function

		Open to the Public for Disposal (4)	Household Hazardous Waste Collection	Problem & Priority Materials Collection (3)	Recycling or Cardboard Collection Site	Industrial & Demo Landfill	Material Reycling Facility Demo or Recycling	Transfer Station	Shingle Collection or Processing	Concrete or Asphalt Processing or Landfill	Trees, Waste Wood/ Pallets, Yard Waste, or Organics	Medical Waste Collection and Processing	Tire Processing or Collection
1	Dem-Con Companies	Open to Public		Collection		Landfill	Recycling & Demo MRF	MSW & Demo	Collection & Processing	Landfill & Processing	Waste Wood		Collection
2	Lloyd's Construction Ser.	Open to Public		Collection				Demo		Processing			Collection
3	Richards' Transfer Station							Recycling					
4	Scrapbusters	Open to Public		Collection				MSW/Demo					Collection
5	Lakers New Prague Sanitary(2)	Open to Public			Cardboard								
6	City of Jordan(2)	Open to Public			Cardboard								
7	Midwest Recycling Solutions										Trees, Brush, Yard Waste		
8	SET-Mulch Store	Open to Public									Trees, Brush, Yard Waste		
9	City of Belle Plaine	Open to Public									Trees, Brush, Yard Waste		
10	Hermans Landscape Supply	Open to Public									Trees, Pallets		
11	SMSC Organics Recycling(1)	Open to Public									Trees, Brush, Yard Waste, Organics		
12	Liberty Tire	Open to Public											Processing & Collection
13	Scott County HHW	Open to Public	HHW	Collection									Collection
14	Daniels Sharpsmart											Med. Waste Processing	
15	Flint Hills Resources								Processing				
16	Union Trail Aggregates									Processing			
17	Commercial Asphalt									Processing			
18	Northwest Asphalt									Processing			
19	Bituminous Roadways									Processing			
20	Knife River Corporation									Processing			
21	Buckingham Companies	Open to Public		Collection	Recycling Site		Recycling MRF						Collection

(1)SMSC's Organics Recycling Facility is open to the public and is a owned and operated by the Shakopee Mdewakanton Sioux Community (SMSC) a federally recognized sovereign nation. (Not open to public for Organics)

(2)Offers Cardboard Collection Only

(3)Problem and Priority materials include but are not limite to; Scrap Metal **(S)**, E-Waste**(E)**, Mattresses**(M)**, Carpet**(C)**, Appliances**(A)**, etc.

(4)Services open to the public may require appointment, are only open certain times of the year, or may only be open to local residents.

(5)Other Business not listed may provide the same or similar waste collection or processing services listed above. (Please check with facility for acceptable items)



Scott County Licensed Waste Facility / Waste Drop off Location 2018 Disposal Costs\*

		MSW	Recycling Public Drop- off	Rec. MRF or Transfer Station	Concrete/ Asphalt	Demolition	Shingles	Furniture	Mattress/Box Springs	Appliances	Electronic Waste	Small Engines	Tires	Organics	Yard Waste	Tree Waste	Wood Waste
1	Dem-Con Companies / MRF / MMSW Transfer Station / Industrial and Demo Landfill	\$85/ton +17% (SWMT)		Fee	Fee	\$40/ton +\$2/ton (SWMT)	\$28/ton	Small \$23.40/Large \$46.80	\$23.40	\$25	\$25/\$40/\$60	\$25	\$10/\$20				
2	Lloyd's Construction Ser. / Demolition Transfer Station				Fee										\$15/yard yard waste and brush		\$15/yard landscape debris
3	Richards' Transfer Station Recycling MRF			Fee													
4	Scrapbusters / MMSW and Demo Transfer Station	Fee	Fee	Fee		Fee		Fee	Fee	Fee	Fee	Fee					Fee
5	Lakers New Prague Sanitary / Licensed Hauler		Cardboard Free														
6	City of Jordan		Cardboard Free														
7	Midwest Recycling Solutions / Compost Site														\$4.00/yard	\$8/Yard	
8	SET-Mulch Store / Compost Site														\$8/yard leaves & grass	\$13/yard \$25/yard \$40/yard	\$6/yard wood chips \$8/yard Brush
9	City of New Prague Yard Waste Site														Leaves, Grass Clippings. Garden Clippings Free	Branches Free	
10	City of Belle Plaine Yard Waste Site														Yard Waste Free	Branches Free	
11	Hermans Landscape Supply / Tree and Wood Waste Collection Site														Free/Brush	Free/Logs/Tree Timmings	Pallets Free
12	SMSC Organics Recycling / Tree and Wood Waste / Organics / Yard Waste Site													Call for Price	\$19/Ton	\$27/Ton Stumps Free Logs & Wood Chips	Free/Non- Treated Wood Products
13	Liberty Tire / Tire Processing												Car-truck \$175/ton Tractor \$310/ton				
14	Scott County HHW / Household Hazardous Waste Facility									\$10	\$10/TV/Monitor	Free/Drained	20 small Free/\$2.50/\$5/\$15/\$30/\$40/ \$60				
15	Flint Hills Resources / Shingle Processing						Fee										
16	Union Trail Aggregates				Fee												
17	Commercial Asphalt				Fee												
18	Northwest Asphalt				Fee												
19	Bituminous Roadways				Fee												
20	Knife River Corporation				Fee												
21	Buckingham Companies / Hauler/ Recycling Center / Recycling MRF	\$85/load or \$5/bag for Customers \$125/Load or \$10/bag non- Customers	Recycling Free for Public	Haulers fees based on Market		Fee		Fee	Fee	Fee	Fee	Fee		Fall of 2018	5 bags free customers 1- 5 Bags \$20 /non- customers		

\*Fees and prices reported as sourced from Website Search on 4/20/18 and/or as reported from Businsees April, 2018 and used for waste plannig purposes only. Contact listed business for current fees and prices

Yellow Posted Website Pricing or reported residential customer pricing
Orange denotes pricing reported to Scott County via email 4/18 or facility reporting
Blue denotes material accepted for a charge, but prices not posted online or reported

## **Material Recovery Facilities (MRF)**

Residential and business recyclables are delivered to MRFs (material recycling facilities) in and outside of the County. Two recycling facilities located in Scott County accept recyclables from haulers across the Region. Pricing and rebates at the recycling facilities vary, in part, because the recycling markets vary. Pricing also depends on other factors, including whether the waste is from residential or business generators, composition of the materials, and the cleanliness of the materials. Contracts are negotiated between the recycling facility and the waste hauler and are not considered public information. Readers should contact the facilities directly for current rates.

**Buckingham Recycling Center** (5980 Credit River Road, Prior Lake, MN 55372) This facility accepts: aluminum, scrap metal, tin cans, magazines, newspaper, office paper, phonebooks, cardboard, glass, plastic bottles, appliances (including gas and commercial appliances), televisions and other electronics, drain oil, oil filters, car batteries, tires (including truck and tractor) and compost. They will accept recyclables from anyone but charge for some items and have a different fee schedule for their route customers than for non-customers. They are also a solid waste hauler licensed to work in Scott County.

**DEM-CON Recovery and Recycling** (LLC, 13020 Dem-Con Drive, Shakopee, MN 55379) Dem-Con's facilities and services include a construction and demolition MRF, single-stream recycling MRF, shingle processing yard, wood processing facility, metals processing facility, MSW & C&D transfer stations, roll-off container services, two state-of-the-art lined disposal facilities, and our Green Grades Educational Program. Dem-Con Recovery and Recycling accepts demolition and construction debris for recycling as well as municipal solid waste for transfer. This transfer station contains a material recovery facility designed for construction and demolition debris. Dem-Con installed the material recovery facility designed for construction and demolition debris in 2008. Loads containing recyclable content are tipped in a transfer station and processed through the material recover facility where wood, concrete, asphalt, steel, cardboard, and other recyclable material are separated for recycling. Dem-Con Recycling and Recovery is located adjacent to the Dem-Con Landfill in Louisville Township. Dem-Con also opened a shingle recycling facility in 2009. The facility accepts tear-off and manufacturer reject shingles for processing. The shingles are sorted and processed for use a substitute for oil in hot mix asphalt. Dem-Con is also provides a drop-off location to the public for scrap metal, tires, electronics and appliances.

## **Organics Management**

Organics recovery consists of food waste and compostables managed as food-to-people, food-for-livestock, source-separated organics for composting, and yard waste. Scott County is neighbor to one of the areas largest compost and organics facilities in the region with SMSC's ORF. This facility receives organics and yard waste from all over the metro area from many of the metro areas largest cities and Haulers. The ORF processes the collected organic material along with yard waste chipped tree debris into a certified compost material which is sold in a variety of different products.

**Shakopee Mdewakanton Sioux Community (SMSC)**. Organics Recycling Facility (ORF) 1905 Mystic Lake Drive South • Shakopee, MN 55379 The SMSC Organics Recycling Facility (ORF), an enterprise owned and operated by the Shakopee Mdewakanton Sioux Community (SMSC). With a focus on being a good steward of the earth they recycle organic materials like paper, food, and yard waste from residential, commercial and municipal customers. They craft a nutrient-rich, natural fertilizer for gardening, farming, landscaping and more. They also process wood to be used as mulch and a renewable energy source. Their Dakota Roots products are available for retail and wholesale. Services include yard waste drop-off, organics recycling, wood grinding, natural fertilizers, and landscaping materials sales.

Other programs throughout the County focus on other aspects of organics management and recovery. Scott County along with waste wise works with area schools, grocery stores, restaurants and other food waste generators to help provide education and outlets for food waste and organic material. These types of outreach program have been successful over the years with users reporting promising organics recycling numbers back to the department for tracking and reporting purposes.

- **Food-to-People:** Programs such as Second Harvest Heartland operate in Scott County collecting unwanted food from grocery stores, etc. That food is then re-used to help feed needy people in the community and elsewhere. Scott County plans to increase support for the Second Harvest heartland Program.
- **Food-to-Livestock:** Historically two schools in Scott County participated in a Food Waste-to Livestock program but currently the only large scale program is operated by the State Prison in Shakopee.
- **Source-Separated Organics Composting:** Organics programs are slowly developing

across Scott County with significant interest in collecting source-separated organics in schools; at large food-producing establishments, such as grocery stores and restaurants; and at local community events.

### **Yard Waste Facilities**

Scott County is home to six yard waste facilities. Two of these facilities are only open for local city collection, two are open to the public for drop off and collection of yard waste, one is open for tree debris or wood waste only, and one facility is only open to contractors for disposal. Depending on the material accepted and the product produced, collection sites may compost or chip material, or both.

**Yard Waste:** Yard waste collection has been successful in Scott County with the help of our local partners. Programs continue to develop and evolve through collection programs and drop-off sites in many communities across the County.

**Specialized Environmental Technologies (SET) Yard Waste, Wood Waste and Soil and Sod commercial and Residential Drop Off**(14800 Johnson Memorial Drive, Shakopee, MN 55379) SET operates a tree, wood and yard waste chipping and compost facility. They accept tree and yard waste from commercial haulers and the general public and operate on a fee for service basis. They sell finished compost and wood chips to commercial customers as well as the general public.

**Midwest Recycling Solutions** Yard Waste and Wood Waste Commercial Drop Off (2510 Strunks Road, Shakopee, MN 55379) Located in Shakopee this compost facility is a tree and yard debris compost and processing facility and transfer station. They sell finished compost to commercial customers.

**Herman's Landscape Supplies, Inc.** Tree and Wood Waste commercial and residential drop off (16586 Johnson Memorial Drive, Jordan, MN 55352) Herman's Landscape Supplies, Inc. grinds unusable pallets, stumps and logs into wood chips that are colored and sold for use as landscaping material.

**City of Belle Plaine yard waste Facility City residents only yard waste and wood waste drop off site** (1295 County Road 6, Belle Plaine, MN 56011) The City of Belle Plaine operates a tree and yard waste collection site for residents of the city.

### **Shakopee Mdewakanton Sioux Community (SMSC) Organics Recycling Facility (ORF)**

Accepts Yard Waste as well as Organics. See citation above in the Organics section.

**City of New Prague yard waste Facility**, 507 12<sup>th</sup> St. NE, New Prague, MN 56071 Accepts yard waste such as branches, leaves, and lawn and garden clippings from City residents only.

### **Non-MSW Land Disposal Facilities**

The TCMA is served by nine Non-MSW landfills. Scott County has only one Non-MSW landfills which accept construction, demolition, and industrial wastes from generators in and outside of the County.

**DEM-CON Landfill, LLC** (13020 Dem-Con Drive, Shakopee, MN 55379) Dem-Con Landfill operates a landfill that accepts demolition, construction, and industrial waste. The facility accepts waste from the general public as well as commercial haulers and also accepts appliances, tires and electronics for recycling. All industrial waste accepted at the facility is pre-approved by the County. Dem-Con's permitted landfill capacity is approximated to last for twenty to twenty-five years, based on current receiving rates. At the end of 2017, the remaining permitted capacity of the Dem-Con Landfill is 7,384,411 cubic yards. In 2017, Dem-Con Landfill received 340,664 cubic yards of material.

### **Licensed Non-MSW Processing Facilities**

**Bituminous Roadways** (6898 County Road 101 E., Shakopee, MN 55379) Bituminous Roadways accept asphalt and concrete recyclable materials only from pre-approved sources and processes these materials and blend them meet customer specifications for various gravel-based materials. They also recycle and process asphalt shingles into blacktop for roads.

**Commercial Asphalt Co** (12351 Chestnut Blvd, Shakopee, MN 55379) Located in Jackson Township, Commercial Asphalt Company accepts asphalt and concrete rubble and processes it to use for specific grades of new aggregate.



**Commercial Asphalt Co** (3460 130TH Street West, Shakopee MN 55379) Located in Louisville Township, Commercial Asphalt Company is permitted to accept asphalt and concrete rubble to use for specific grades of new aggregate but currently does not operate at this location.

**Knife River North Central Region K** (6730 Old Hwy 169 Blvd, Jordan, MN 55352) Located in St. Lawrence Township, Knife River accepts is permitted to accept waste asphalt and concrete rubble to process for specific grades of new aggregate.

**Lloyds Construction Service Inc.** (7211 128TH St W, Savage, MN 55378) Lloyd's Construction Services specializes as a construction debris transfer station. They provide demolition and container service for construction sites, bring the collected material back to their facility where it is sorted to remove recyclable materials such as metal, concrete, wood, and demolition debris. Material is then transferred for proper disposal or concrete is processed on site for specific grades of new aggregate.

**Daniels Sharpsmart** (Shakopee, MN 55379)

Daniels Sharpsmart collects medical waste from hospitals and clinics throughout North

America and transports the waste back to their Shakopee Facility for processing. The medical waste is autoclaved and disposed in a landfill local landfill.

**Northwest Asphalt Inc.** (1451 County Road 18, Shakopee, MN 55379) Northwest Asphalt, Inc. is licensed by the County to accept waste asphalt and concrete rubble and then process the material to use for specific grades of new aggregate.

**Liberty Tire Recycling LLC** (12498 Wyoming Ave S, Savage MN 55378) Liberty Tire Recycling, LLC is a waste tire processing facility. They accept waste tires from commercial sources and the general public and then process those tires into tire derived fuel (TDF) and rubber mulch. They also sell tire to recyclers for retreading and recapping. Reclaimed steel from the shredding process and de-rimming is recycled.

### **Hazardous Waste and Problem Materials Facility**

**Scott County Household Hazardous Waste Facility (HHW)** (588 County Trail East, Jordan, MN) The Scott County HHW provides a year-round location for residents and businesses to drop off household and business hazardous waste and problem materials. Readers should contact

the Scott County HHW or the Scott County website for information regarding fees and acceptable materials.

### **Transfer Stations**

Scott County permits and inspects solid waste transfer stations that accept and transfer different types of waste to include MSW, Demolition, and Industrial Waste.

**NEXEO Solutions, LLC**, Hazardous Waste Transfer Station 4401 Valley Industrial Blvd S, Shakopee, MN 55379 Nexeo receives hazardous and non-hazardous waste from customers and transfer to the waste to various disposal sites. They are not open to the public for transfer or disposal.

**Richard's Transfer Facility Recyclables Transfer Station** (12101 Yosemite Avenue South, Savage, MN 55378) Richards' Transfer Facility is a solid waste management transfer station operated by Waste Management. Source separated recyclables such as paper, cardboard, plastic and metal containers are unloaded at this facility. They also segregate out appliances, electronics, and tires that are found in the loads for recycling and transfer them for proper disposal.

**DEM-CON Recovery and Recycling LLC MSW Transfer Station**, (13020 Dem-Con Drive, Shakopee, MN 55379) Dem-Con operated Scott County's largest MSW transfer station and the only one that is open to both all waste haulers and residents. MSW is collected and then transferred to landfills and solid waste processing facilities outside of the County.

**Lloyds Construction Service, Inc. Construction Debris Transfer Station** (7211 128TH St W, Savage, MN 55378) Lloyd's Construction Services specializes as a construction debris transfer station. They provide demolition and container service for construction sites, bring the collected material back to their facility where it is sorted to remove recyclable materials such as metal, concrete, wood, and demolition debris. Material is then transferred for proper disposal or concrete is processed on site for specific grades of new aggregate.

**Scrapbusters MSW and Demolition Transfer Station** (1477 Maras Street, Shakopee, MN 55379 USA) Scrapbusters is a licensed transfer station in Scott County for both MSW and Demolition. They are open to the public by appointment.

## **Collection and Transportation of Waste**

### **Hauling Systems in Scott County**

Solid Waste, which includes MSW, Demolition and Construction Debris and Industrial Waste, recyclables, organics, and yard waste, in the County are collected and transported largely through an open hauling system, where businesses and residents contract with a private waste hauler of their choice. Two cities, Shakopee and Jordan, contract with a hauler for organized collection. Although, Belle Plaine, Jordan, New Prague, and Elko New Market, do not have a contract hauler for organized collection they are mostly serviced by one local hauler.

The solid waste hauler collects and transports the waste for disposal, processing, or recycling. The hauler determines if waste is transported to the landfill, a processing facility, or to a transfer station. The hauler makes the decision on where to take the waste based on cost to deliver the material at a particular facility and/or distance to that facility. In the case where the waste is coming from a public entity such as a city or public school, and if the hauler has a contract with that public entity that directs where the waste must be delivered, that waste must be delivered to a processing facility. The haulers in Scott County typically take the MSW to Dem-Con Companies transfer station in Shakopee or the Burnsville Landfill because they are the closest waste facilities.

Dem-Con transports the MSW to either a landfill such as the Pine Bend landfill or Burnsville landfill, or to a processing facility (waste to energy). Until recently, some of Scott County's waste was going to the processing facility in Newport. In the future, MSW delivered to the Dem-Con transfer station that is designated to be processed, will likely be delivered to Great River Energy Facility in Elk River

In 2015, Ramsey and Washington Counties purchased the processing facility in Newport, now named the Recycling & Energy Center (R&E Center). Recently, Ramsey and Washington Counties approved a "designation plan" that requires all trash generated in those Counties to go to the R&E Center; that will ensure some certainty that R&E Center receives enough waste to work at optimal capacity. As a result, there is uncertainty as to where some of the waste from Scott County will go if the R&E Center is full. There are other processing facilities in the region, such as the HERC in Minneapolis and Great River Energy Facility in Elk River, but those facilities are farther away which may result in a higher cost for waste to be disposed of, primarily

because of higher transportation costs to processing facilities compared to land disposal facilities.

The number of licensed Solid Waste Haulers varies from year to year. For 2017 Scott County Licensed 38 haulers who collect and transport both MSW and demolition or construction debris. Of the 38 licensed Haulers currently 6 operate out of and are licensed to haul MSW in Scott County. For 2018 Scott County will join the Regional Hauler Licensing Joint Powers Agreement and only those haulers that collect or transport MSW will be required to be licensed through the Regional Hauler Licensing Program. Under this program those Haulers that collect and transport only demolition or construction debris or industrial waste will not need to be licensed under the licensing program. Any hauler can collect or transport recycling without a license.

#### **Scott County Based, Licensed MSW Haulers**

**Lakers New Prague Sanitary** (27252 Helena Blvd, New Prague, MN 56071) Based in New Prague, MN and in operation since 1977, Lakers New Prague Sanitary provides residential and commercial Solid Waste and recycling collection and transportation to the Prior Lake, Burnsville, Eagan, Lakeville, Elko-New Market, Farmington, and Webster areas. They also offer Residential Garbage Service in and around the New Prague area, Commercial Dumpster Services in New Prague, Belle Plaine, Elko New Market, Jordan, Kilkenney, Lonsdale, Montgomery, Le Center, Le Sueur, Shakopee and Webster, MN and surrounding areas and Roll off Container Services within 25 miles of our New Prague Facility.

**The Buckingham Companies** (5980 Credit River Road, Prior Lake, MN 55372) Buckingham Companies has been in operation for 50 years in 2018 and provides numerous waste and recycling services to the Scott County area and beyond to include the operation of a recycling center open to the public in Prior Lake. They also provide collection and transportation of residential and commercial solid waste and recycling. The Buckingham Companies also offer dumpster and roll off box services as well as traditional curbside collection. They also plan to open an organics collection facility at their recycling center by the end of 2018.

**DEM-CON Companies, LLC** (13020 Dem-Con Drive, Shakopee, MN 55379) Dem-Con Companies, LLC is a third-generation family owned company that has been servicing the Twin Cities and greater MN since 1965. What started as an MSW Landfill in the 60's has evolved

through three generations into an integrated solid waste processing company that can meet the needs of Dem-Con's customers and communities throughout Minnesota and surrounding states. Dem-Con's facilities and services include a construction and demolition MRF, single-stream recycling MRF, shingle processing yard, wood processing facility, metals processing facility, MSW & C&D transfer stations, roll-off container services, two state-of-the-art lined disposal facilities, and our Green Grades Educational Program.

**Suburban Waste Services (SWS)** (12400 Princeton Ave S., Suite F Savage, MN 55378)

Suburban Waste Services is a local, hometown garbage hauler located in Savage, MN. SWS provides residential waste removal services, including: weekly trash pickup, weekly yard waste removal, one-time bulk pickups, and no-sort recycling in the communities. SWS currently operates in the following cities: Carver, Chanhassen, Chaska, Cologne, Eden Prairie, Prior Lake, Savage, Shakopee, Victoria and Waconia where pickup is every other week. They also provide service to the communities of Edina, Minnetonka & Plymouth.

**1-800-GOT-JUNK** Operates as a Licensed waste Hauler in Scott County out of Savage, MN.

They offer junk removal services for home or business and accept many problem materials such as furniture, appliances, electronics, tires, construction debris, or yard waste for disposal.

**Scrapbusters** (1477 Maras Street, Shakopee, MN 55379 USA) Scrapbusters is a licensed transfer station in Scott County for both MSW and Demolition and accept most recyclables and problem material for disposal. They also offer roll-off box service, demolition services and junk removal services.

**Total Sanitation** (7804 County Road 101 E, Shakopee, MN 55379)

Total Sanitation provides roll-off service to residents and business in the Scott County area as well as dumpster service for garbage and recycling to the area.

**Construction, Demolition, Industrial Waste and Recycling Haulers**

Scott County is also home to numerous waste haulers that provide roll-off service for construction, demolition, industrial waste, and recyclables. For 2017 these haulers were licensed in Scott County under a Hauler License, but as of 2018 those Haulers that do not haul MSW will not be required to be licensed as a Hauler under the Regional Hauler Licensing Program.

## **Recycling and Processing of Solid Waste**

Several companies in Scott County function as end use markets for recyclable materials (Anchor Glass, Inland Container, CertainTeed, Commercial Asphalt, Northwest Asphalt, Bituminous Roadways, Buffalo Bituminous, Herman's Landscape, By the Yard, and Liberty Tire Technologies). Materials which these markets accept and use in the County include: glass, cardboard, asphalt, tires, plastic bags, pallets, shingles, and concrete. Depending on what these Facilities accept, they may be licensed under the Scott County Solid Waste Ordinance as a Solid Waste Facility.

## **Other Collection Locations**

Scott County has many other collection and drop off locations throughout that take items for proper disposal, donation, or recycling. A few of these facilities and locations are listed below:

### **Community Action Partnership (CAP) of Scott Carver, and Dakota Counties,**

Accepts donations for area food shelves and its thrift store which helps reuse and recycling. Scott County has food shelf locations in Shakopee, Belle Plain, Jordan and New Prague.

**Goodwill**, a nonprofit, nationwide thrift store with 2 Scott County locations aims to "donate-shop-reuse-educate-employ"

**Take It to The Box**, is a program for Scott County residents to dispose of unneeded prescription and over-the-counter medications, pet medications, illegal drugs and drug paraphernalia, anonymously, at no charge, courtesy of a partnership with Scott County Drug Prevention Task Force.

**Book drops**, Scott County has book donation drop-offs at area locations including the County's HHW where users can drop off books for re-use.

**Cardboard Drop-off Locations**-Dick's Sanitation and the City of Jordan, Lakers New Prague Sanitary in New Prague, and the Buckingham Companies of Prior Lake all provide a cardboard drop-off location for cardboard recycling in the above communities.

**Community One-Day Cleanup Events**-Scott County sponsors and helps to fund cleanup events in all Scott County communities. Local municipalities along with township partners host these events every spring and help residents with the collection and recycling of many problem materials such as shredded paper, mattresses, appliances, etc.

## **Schedule of existing rates and charges**

**Hauler Collected Fees:** Hauler fees for trash and recyclables collection vary because the public, public and private institutions and private sector generators negotiates rates and charges with waste management service providers in the waste management industry. Ordinance No.2 includes the following requirements related to hauler collected fees:

**Volume Based Fees.** All licensed haulers collecting mixed municipal solid waste shall offer a pricing system to their customers that increases with the volume or weight of the waste collected.

- A. For all residential collection, haulers shall offer at least two separate pricing systems based on volumes of waste to their customers.
- B. If unlimited or traditional volumes of solid waste are offered for collection, there shall be at least two other volumes offered and unlimited or traditional volumes shall be priced higher than the rate for the next lowest volume.

**Base Volume Established.** In accordance with Minnesota Statute Chapter 115A.93, Scott County hereby establishes the minimum volume of 38 gallons or less of mixed municipal solid waste collected. Collection shall be at least one time per week.

### **Residential Garbage Service and Recycling Pricing**

The Scott County Solid Waste Ordinance states that for all residential generators where the hauler contacts for service directly with the generator, the hauler shall provide to the generator the opportunity to recycle. The Ordinance also states that “No mixed municipal solid waste collector shall impose a greater fee on a resident who recycles than on a resident who does not recycle.”

Because Scott County land use remains 70 percent rural and recycling is required anywhere a hauler provides service, MSW residential service rates vary greatly in Scott County as can be seen in Table # 4 below. Two municipalities contract with a single hauler for service which traditionally provides the lowest price for garbage and recycling collection while service in the County’s rural areas, although higher, is still at a reasonable rate.

**Table A-4: MSW and Recycling Residential Rates in Scott County**

MSW Residential Service Rates in Scott County	Price Per Month/Cart Size		(Gallons)
	30-35 Gallon	60-68 Gallon	90-96 Gallon
Garbage Service Rates in an open system (Scott County Townships and Non-contract Cities)	\$12.83 - \$18.95	\$13.93 - \$19.95	\$15.03 - \$20.95
Rates for Scott County Cities with contracts (Jordan and Shakopee)	\$9.32 - \$10.15	\$12.34 - \$13.43	\$14.50 - \$15.91
Rates calculated include garbage service 1x/week and recycling service 1x every other week			
Some listed prices include taxes and fees (Dependent on Hauler Reporting)			
*Average Prices calculated from 2016 and 2017 Scott County Licensed Hauler Reports			

## **Solid and Hazardous Waste Regulations**

### **Ordinances**

The County regulates waste haulers, generators, and facilities using ordinances, licenses, compliance inspections, technical assistance and enforcement. Compliance inspections are conducted regularly to evaluate solid and hazardous waste facility operations for compliance with license conditions. Inspection frequency is based on the type of facility, potential risk to the environment, and compliance history. If a facility is found to be out of compliance, a range of actions ensue, typically beginning with formal notification of inspection findings and providing opportunities to correct the problem.

**County Solid Waste Ordinance:** Scott County's solid waste regulation program began in the 1980's with adoption of Ordinance No. 2, which includes standards for regulating solid waste management and the operation of solid waste facilities, including infectious waste facilities; requirements for certain facilities on a disposal site; and provisions for application and license fees, financial assurance, and penalties for lack of compliance with these provisions.

**County Hazardous Waste Ordinance:** The County's hazardous waste regulatory program began in 1977 with the passage of the Waste Management Act and County Board adoption of Scott County Ordinance No. 12, Hazardous Waste Regulation (Ordinance 12) in 1980. Ordinance 12 establishes standards for generating, storing, processing, or managing hazardous waste in Scott County.



## Licenses

**Solid Waste Facility Licenses:** Solid waste management facilities must have a license from Scott County to operate. The County licenses industrial and demolition landfills, waste processing and recycling facilities, transfer stations, yard waste compost sites, and organics composting facilities. The County issues solid waste facility licenses for a one-year period. Scott County Cities also licenses those haulers who operate within their city boundaries. Scott County Cities and their Hauler licensing structure is listed in Table #5 below.

**Table A-5 City Licensed Haulers in Scott County**

<b>Scott County Cities Hauler Licensing Programs MN 2018</b>						
	<b>Residential Hauler Licenses</b>			<b>Commercial Hauler Licenses</b>		
<b>Cities in Scott County</b>	<b>Number of Licenses</b>	<b>Fee</b>	<b>Term of License</b>	<b>Number of Licenses</b>	<b>Fee</b>	<b>Term of License</b>
<b>Belle Plaine</b>	No Limit	\$500	Annual	Not Licensed	N/A	N/A
<b>Elko New Market</b>	3	\$250	Annual	Not Licensed	N/A	N/A
<b>Jordan</b>	1	\$1,500	Per Contract	No Limit	\$150	Annual
<b>New Prague</b>	1 per 7000 Residents	\$100 1st Vehicle/ \$25 extra vehicles	Annual	No Limit	\$100 1st Vehicle/\$25 extra vehicles	Annual
<b>Prior Lake</b>	No Limit	\$250 1st Vehicle/ \$50 extra vehicles	Annual	No Limit	\$250 1st Vehicle/\$50 extra vehicles	Annual
<b>Savage</b>	No Limit	\$100 1st Vehicle/ \$25 extra vehicles	Annual	No Limit	\$100 1st Vehicle/\$25 extra vehicles	Annual
<b>Shakopee</b>	1	\$125	Per Contract	No Limit	\$125	Annual

**Hazardous Waste Generator Licenses:** Scott County annually licenses hazardous waste generators, with fees based on the amount of hazardous waste generated. Minimal generators, those that generate ten gallons or less of hazardous waste per year and no acute hazardous waste, are not required to have a license; however, are required to register with the County and obtain a Hazardous Waste Identification Number (HWID) from the MPCA.

**Hazardous Waste Facility Licenses:** Scott County licenses hazardous waste facilities, including storage facilities, ten-day transfer facilities, storage and recycling facilities, treatment facilities, HHW and Very Small Quantity Generator (VSQG) collection sites, universal waste sites, electronic collection sites and used oil collection sites.

## **MSW Landfills**

Landfills accept waste from the region, state, and surrounding states. Although landfilling is the least preferred management method, it is necessary in an integrated waste system. Scott County has no MSW Landfills within its borders and thus does not have a regional role in regulating MSW landfills. Because of this fact, the County's role in MSW land disposal is through the regulation of MSW transfer stations located in the County that serve the region as well as MSW Haulers that operate within the County. The County regulates acceptance of waste at facilities located within the County such as transfer stations, including material bans and prohibitions and works with local haulers to ensure ordinance requirements are met.

## **Revenue Sources**

**Select Committee on Recycling and the Environment (SCORE) Funding:** SCORE funds are derived from a percentage of State tax for MSW and non-MSW management services (Solid Waste Management Tax- SWMT). Services subject to this tax include collection, transportation, processing, and disposal of waste materials. Service providers (haulers and disposal facility operators) who directly bill generators or customers are responsible for collecting and remitting the tax to the State. Over \$70 million is generated annually through the tax statewide. Roughly 50 percent of the SWMT goes to the MPCA's Environmental Fund for solid waste and landfill cleanup activities, 30 percent goes to the State General Fund, and 20 percent is distributed to Minnesota counties as SCORE allocations to support local waste reduction and recycling programs.

**Local Recycling Development Grant (LDRG) Funding and Metropolitan Landfill Abatement Account (MLAA):** LRDG is a grant program (Minn. Stat. §473.844) funded by the MLAA and used for landfill abatement projects in the TCMA. MLAA assists with establishing an integrated and coordinated solid waste management system in the region. The focus of the program is intended to be consistent with the Waste Management Act, and implement the policies and programs outlined in the Policy Plan. Funding for the MLAA program is generated from a \$2.00 per cubic yard (or \$6.66 per ton) surcharge on MSW disposed of at Metropolitan landfills. Paid

by solid waste facilities, three-quarters of the surcharge proceeds are deposited into the MLAA. The MLAA funds the LRDG program, with grants offered to the TCMA counties.

**Program.**

The commissioner shall encourage the development of permanent local recycling programs throughout the metropolitan area. The commissioner shall make grants to qualifying metropolitan counties as provided in this section.

**Subd. 3.Grants; eligible costs.**

Grants may be used to pay for planning, developing, and operating yard waste composting and recycling programs.

Counties must support and maintain effective municipal recycling as a condition of receiving LRDG funds and must match LRDG funds with an equal county contribution. LRDG funds are distributed from the MLAA and administered by the MPCA.

**Fees:** The County collects fees from solid and hazardous waste facilities and haulers that it licenses and regulates. Fees vary depending on the facility type, and the type and volume of waste managed. Additional fees are collected for specific services, such as electronics recycling and use of the business services at county funding.

**Reimbursements:** Reimbursements include payments from organizations for product stewardship initiatives (e.g., architectural paint) and through agreements with organizations (e.g., fluorescent bulbs, pesticides, HHW reciprocity).

**Scott County Household Hazardous Waste Facility (HHW):**

The Scott County HHW opened in 2001 and is staffed by county employees. It is open to the public 3 days a week for residential hazardous waste drop-off and by appointment for businesses. HHW facilities provide homeowners a place to dispose of their household chemicals safely and at low cost. In 2017, a \$1.5 million dollar expansion was finalized to better serve the residents of Scott County. This expansion alleviated storage capacity issue and traffic congestion for customers dropping of items.

The facility has reached it maximum construction limits; it is surrounded by property lines, a highway, and other county buildings. The improvements made in 2017 will help the County meet

the demand for a while. However, this is a popular service, and increased use in both number of participants and amount of materials is increasing rapidly.

The types of materials being dropped off at the facility has also changed significantly in recent years. The Scott County HHW has collected data on the volume of waste received and participation rate since 2000. We can see from the data the cost of disposal, volume of waste, and participation has been rising, but we cannot predict at what point participation will plateau or what future services are needed. Although, participation is increasing we suspect that we are not reaching all demographics on availability of our service. Although, we are limited on space and staff we must determine what additional non-hazardous waste stream we can accept to help residents with proper disposal. The County needs information and analysis from which to anticipate and prepare for future demands at the HHW.

**Table A-6: Scott County HHW Program 2016 Expenditures and Revenue**

Program Expenditures	
<b>Waste Management</b>	276214.57
<b>Education</b>	2323
<b>Program Management</b>	4683.54
<b>Salaries</b>	123258.27
Capital Expenditures	1132486.54
Total Expenditure	1538965.92
Revenue	
<b>Donation</b>	465.17
<b>VSQG</b>	2295.06
<b>Solid Waste Service Fee</b>	7677.63
<b>Special Waste Fee</b>	520539.68
<b>Dept. of Ag</b>	775.75
<b>Fluorescent lamp reimbursement</b>	6327.01
<b>Electronics Reimbursement</b>	3367.66
<b>Paint Reimbursement</b>	83479
<b>Total Revenue</b>	624926.96

**Residential Material Drop-Off:** Residents drop off HHW and problem materials at no charge, including: oil- based paint, flammable solvents, pesticides, automotive fluids, aerosols, propane tanks, fluorescent bulbs, and batteries. In January of 2018, a fee was implemented for the collection of TVs, monitors, and appliances. Other electronics remain free for residents to drop-off. The HHW also accepts some problem materials that can be difficult to manage in the normal solid waste stream, such as latex paint, household cleaners, used oil, and tires. Additional materials collected at no charge include, lead fishing tackle, alkaline batteries, e-cigarettes, and holiday lights.

**Business Universal Waste, Electronics, and Fluorescent Lamp Collection:** For a minimal fee, businesses can bring in universal waste, electronics, and spent fluorescent lamps to the HHW on the first Tuesday of every month from 9:00 – noon or by appointment. Scott County partners with Xcel Energy to offer businesses free disposal of up to ten bulbs per year, as part of Xcel Energy's compliance with State law (Minn. Statute 216B.241).

**Business Very Small Quantity Generator (VSQG) Program:** Scott County also offers a program to help businesses that produce small amounts of hazardous waste to comply with the hazardous waste rules. Technical assistance is provided and businesses are required to make an appointment to participate in the program and pay a fee.

**Paint Collection:** Scott County accepts business and household architectural paint at the Scott County HHW at no charge. Minn. Stat. §115A.1415 requires that for architectural paint sold in the state, producers must implement and finance a statewide product stewardship program. PaintCare, Inc. was established to represent paint producers and operate the paint product stewardship program in Minnesota. Through an agreement, PaintCare provides funds to Scott County to pay for collection, transport, and processing of architectural paint.

**Pesticide Collection Program:** Scott County accepts household pesticides at the Scott County HHW at no charge. Minn. Stat. §18B.065 requires the Minnesota Department of Agriculture (MDA) to establish and operate a waste pesticide collection program for Minnesota counties. The MDA enters into cooperative agreements with counties to fund collection of business and household waste pesticides.

**Residential Collection Events**

Under the Solid Water Program, Scott County helps to fund and collaborates with municipalities every year to support collection events for problem waste and recyclables.

**Residential Sharps and Pharmaceuticals Collections**

Scott County supports the “Take it to the Box” Program to help the collection and recycling of Pharmaceuticals and provides Scott County residents the opportunity to properly dispose of Residential Sharps through the reciprocity agreement with Dakota County’s Recycling Zone.

## APPENDIX III: ACRONYMS

---

ACRONYMS	
<b>ARM</b>	Association of Recycling Managers
<b>C&amp;D</b>	Construction and Demolition Waste
<b>CAP</b>	Community Action Partnership
<b>EPA</b>	United States Environmental Protection Agency
<b>EPP</b>	Environmentally Preferable Purchasing
<b>FISH</b>	Families and Individuals Sharing Hope
<b>HHW</b>	Household Hazardous Waste
<b>LRDG</b>	Local Recycling Development Grant
<b>MnTAP</b>	Minnesota Technical Assistance Program
<b>MPCA</b>	Minnesota Pollution Control Agency
<b>MRF</b>	Materials Recovery Facility
<b>MSW</b>	Municipal Solid Waste
<b>ORF</b>	Organics Recycling Facility
<b>RAM</b>	Recycling Association of Minnesota
<b>REC</b>	Recycling Education Committee
<b>RDF</b>	Refuse Derived Fuel
<b>SCORE</b>	Select Committee on Recycling and the Environment
<b>SET</b>	Specialized Environmental Technologies
<b>SMM</b>	Sustainable Materials Management
<b>SMSC</b>	Shakopee Mdewakanton Sioux Community
<b>SWAA</b>	Solid Waste Administrators Administration
<b>SWAC</b>	Solid Waste Advisory Committee
<b>SWANA</b>	Solid Waste Association of North America
<b>SSOM</b>	Source Separated Organic Materials
<b>TCMA</b>	Twin Cities Metropolitan Area
<b>VSQG</b>	Very Small Quantity Generator
<b>WMA</b>	Waste Management Act

## APPENDIX IV: SOLID WASTE ADVISORY COMMITTEE

---

The Solid Waste Advisory Committee is a legislatively required committee (MN Stat. Chap. 473.803, Subd. 4) with categories of membership per the committee bylaws consisting of two citizen representatives, eight representatives from municipalities (cities and towns) within the county, four representatives from the solid waste industry, and Program Manager for Environmental Services. A representative of the Commissioner of the Minnesota Pollution Control Agency is a nonvoting ex officio member of the committee.

PUBLIC ENTITIES		SOLID WASTE BUSINESSES	
Tom Nikunen City Administrator 210 East First Street Jordan, MN 55352		Mike Buckingham-Hayes Buckingham Disposal, Inc. 5980 Credit River Road Prior Lake, MN 55372	
Kenneth D. Ondich Planning Director City of New Prague 118 Central Avenue North New Prague, MN 56071		Mark Pahl Dem-Con Companies, LLC 13020 Dem-Con Drive Shakopee, MN 55379	
Mark Nagel Assistant City Administrator 601 Main Street P.O. Box 99 Elko New Market, MN 55054		Kevin Tritz / Ryan Tritz Specialized Environmental Tech. 8585 W. 78th Street Suite 150 Bloomington, MN 55438	
Bob Pieper Louisville Township 14391 Old Brick Yard Rd. Shakopee, MN 55379		Al Fridges Shakopee Mdewakantonwan Sioux Community 1905 Mystic Lake Drive South Shakopee, MN 55379	
Barbara Kane Johnson Scott County Planning Advisory Commission Commissioner District 4			
CITIZEN		CITIZEN	
Meg Glatty 2075 189th St E Jordan, MN 55352		Belinda Eastlake 4208 W 124th St. Savage, MN 55378	



APPENDIX V: GRANT INFORMATION AND REQUIREMENTS

Scott County Recycling-Organic Collection Grant  
Instructions and Requirements

Scott County is committed to increasing recycling rates and organic recovery by the year 2030. The purpose of this grant program is to reach out to businesses and help them increase recycling-organic efforts and achieve compliance with State requirements.

A MN Waste Wise Foundation Specialist will start by conducting a free 30-minute waste assessment at your business. The specialist will then review options for you to reduce what goes in the trash dumpster at your business. These options may include starting a food waste recycling program or putting more paper, plastic, metal and glass materials in the recycling bin. Ultimately, these changes could save your business money by reducing the size of your trash dumpster or the frequency of pickup.

Grant Funding

Businesses and institutions can apply for grants to reimburse their new recycling and organic program costs. Grants are available for up to \$25,000. Scott County may reimburse approved grant requests up to \$10,000 with no match required; and may reimburse 50% of the grant request over \$10,000. Grant requests for over \$10,000 will require a 50% cash match from the applicant for the amounts above \$10,000.

Example:

	\$0-\$10,000
Grant Request Total	\$9,500
Business Match required	\$0
County Reimbursement	\$9,500

Example:

	\$10,001-\$25,000
Grant Request Total	\$12,000
Subtract County \$10,000 grant, no match required	(-) \$10,000
Remaining Balance requiring match	\$2000
Business 50% Cash Match	\$1000
County 50% Reimbursement	\$1000

Scott County will order and pay for containers and labels requested by applicants within the Container Catalog. The containers and labels will be shipped to the applicant. Scott County will reimburse other expenses after MN Waste Wise or County staff has confirmed that allowable purchases have been made and programs implemented as proposed in the application.

Applications will be accepted and evaluated throughout the year on a “first come-first serve basis.” Applications will be considered year round until funds have been fully disbursed. Businesses can apply one time per calendar year. The grant applications take approximately 4 weeks to process depending upon the date received and the quality of the application. Applications that meet the program objectives and requirements approved by the Scott County Board of Commissioners will be evaluated by staff. Scott County Applications that do not meet program objectives and requirements but have merit to increase recycling or organic collection will be reviewed by the Scott County Board of Commissioners. During the review process, staff may contact the applicant for additional information and/or to clarify the proposal content. A site visit from MN Waste Wise is required prior to awarding grant funds. All decisions by Scott County will be final and are not subject to review.

### **How to Submit a Grant Application**

Prospective candidates must submit an application form, which can be accessed at [www.scottcountymn.gov](http://www.scottcountymn.gov). Completed applications can be submitted by mail or by email (County is not responsible for lost or misdirected submissions):

- **Submit by mail:** Scott County Environmental Services | Attn: Recycling-Organic Collection Application | 200 Fourth Ave W | Shakopee, MN 55379
- **Submit by email:** [ssteuber@co.scott.mn.us](mailto:ssteuber@co.scott.mn.us) | Subject: Business Recycling Reward Application
- **Submit by fax:** 952-496-8496 | Attn: Recycling-Organic Collection Application
- Steve Steuber, Scott County Solid Waste Management, can provide feedback, evaluation guidance, and information on resources. 952-496-8473

### **Eligibility and Guidelines**

#### **Eligibility:**

- Geographical Service Area: Businesses must be physically located in Scott County. If your business has multiple locations in Scott County, each location is eligible for a grant.
- Eligible Businesses: Grants are available to any for-profit or non-profit non-residential waste generator in Scott County excluding:
  - The federal government;
  - The State of Minnesota;
  - Regional Agencies;
- Business must be responsible for managing the recycling and trash hauling contract for the properties you own, lease, rent, manage or maintain.

#### **Guidelines – Applicant Businesses must:**

- Complete a grant application.
- Agree to host a site visit with a specialist from Minnesota Waste Wise or County staff to review current on-site solid waste operations and equipment, discuss the application's objectives and approach, and determine project reporting parameters.
- Upon acceptance of grant application, enter into a grant agreement with Scott County. The application, once completed, will serve as an attachment to the agreement.
- Submit a description of the proposed recycling or organic collection activity (-ies) and how the business will implement.
- Agree to carry out recycling activities for no less than an 18-month term.
- Agree to report both baseline pre-grant and post-grant quantities of a) materials recycled, b) food recovered, and c) trash. A MN Waste Wise specialist can provide this information for the applicant following the site visit.
- Provide a 3 sentence testimonial with a picture or video at the end of the 18-month grant period and agree to serve as a "Success Story," if asked.
- Agree that grant funds are to be used for new or expanded efforts. Funding is not to be used for maintaining existing efforts.

### **Evaluation Criteria**

All submitted applications will be evaluated according to the following criteria:

- Outcomes – Business' objectives are clearly stated, specific, realistic, and measurable.
- Impact – The estimated level of achieving diversion of recyclables and organics from the trash.
- Alignment with the Scott County program objectives to:
  - Support business working to be in compliance with Minnesota Statute
  - Support business working to reduce or reuse solid waste
  - Support business starting or improving recycling to at least 3 types (paper, plastic, metal, glass) and organic collection
  - Support businesses encouragement and outreach to employees and public to participate in the recycling program

### **Reporting Requirements**

All businesses awarded a grant through this program will be required to complete a pre-grant and post grant report. The report must include documentation on a form provided by Scott County. The reports will provide Scott County with information about quantities of recyclables, food waste/organics, and trash produced before and after the grant term. The pre-grant report is due within 45 days of signature of grant agreement and the post-grant report is due 20-months from the start date of the grant term.

### **Appropriate Use of Funds and Restrictions**

Examples of eligible expenses include, but are not limited to:

- Container/Bins for recycling, organics, and trash.
- Sorting stations.
- Totes, carts, cart tipplers, and other waste containers for transportation to containers serviced by hauler.
- Compactors, balers, and organics management systems for storage, managing odor and space concerns for businesses generating large quantities of recyclables or organics.
- Up to 6-months' supply of compostable plastic bags for lining organics collection containers and compostable food service ware.
- Signage, labels and other recycling, food waste, or organic recovery program educational materials.

### **Fund Dispersal**

**Container/Bins:** No funds are transferred to the business for containers/bins. Upon approval of the grant application and site visit from the MN Waste Wise Specialist, Scott County will order and pay for the containers identified in the business' grant application. If the application is revised due to input from the specialist, the revised container needs will be considered. The containers will be delivered directly to the business.

**Other Items:** The business must purchase other items as proposed in the application. After the purchase and implementation of other items, the business must contact MN Waste Wise or Scott County to confirm purchase (for example, a site visit at business, or receipts provided). Scott County will process approved reimbursement within 10 working days of confirmation.

**Cash Match:** Businesses that request over \$10,000 are required to provide a 50% cash match. The 50% cash match payment must be either spent on the "other items" proposed in the application or submitted to Scott County. Receipts must be provided for all cash expenses.

### **Scott County Rights**

Scott County may require confirmation of information furnished by applicants. Scott County reserves the right to:

- Reject any or all applications if such action is in the public interest;
- Cancel the entire grant program;
- Appoint evaluation committees to review grant applications;
- Negotiate with any, all, or none of the grant respondents.

The Grant does not commit Scott County to enter into a contract with any applicant, nor does it obligate the Scott County to pay for any costs incurred in preparation and submission of applications or in anticipation of a grant.

**Recycling containers** purchased through this grant should:

- Be paired with a trash container, or be part of a unified “waste station” that includes both trash and recycling disposal components that cannot be separated.
- If part of a unified station, the recycling component should be well labeled and, ideally, color-coded to match other recycling bins.
- Be clearly labeled with a decal that lists all acceptable materials. The County will supply labels at no charge or make art work available to a business to create their own customizable labels at the business’ expense.

**Food scrap/organics collection containers** purchased through this grant should:

- Be placed as close to a trash and recycling containers as possible in order to provide equally convenient access to users.
- If part of a unified station, the food scrap/organic component should be well labeled and, ideally, color-coded to match other food scrap/organic bins.
- Be clearly labeled with a decal that lists all acceptable materials. The County will supply labels at no charge or make art work available to a business to create their own labels.

### **Definitions**

**Recycling** - Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material. With recycling, you generally need to collect a material, transport it, clean and sort it, transform it (for example, melt it down, see secondary material, below), market that transformed material, make the transformed material into a new product, package the product, and market the product.

**Organics**- Organic waste is anything that comes from plants or animals that is biodegradable and could include the following materials:

- |   |  |
|---|--|
| • Fruits and vegetables scraps                                      | • Used napkins, paper towels, paper plates           |
| • Meat, poultry, and seafood scraps                                 | • Milk cartons, tea bags, coffee grounds and filters |
| • Bones (yes, bones)  | • Parchment and waxed papers                         |
| • Waxed cardboard products (ex. Chinese take-out boxes)             | • Plants and flowers                                 |
| • Frozen/refrigerated food boxes (ex. frozen pizza, frozen dinners) | • All yard waste                                     |

## **APPENDIX VI FUTURE IQ SOLID WASTE MANAGEMENT REPORT**



future→iQ



# **SCOTT COUNTY SOLID WASTE MANAGEMENT**

SCENARIO-BASED PLANNING WORKSHOP

March 27, 2017



# SCOTT COUNTY SOLID WASTE MANAGEMENT SCENARIO-BASED FUTURE THINK-TANK WORKSHOP

Scott County, Minnesota

This report summarizes the half-day scenario planning session held in Prior Lake, Minnesota, on March 27, 2017. Approximately 18 Solid Waste Management stakeholders and county staff participated in the workshop and developed the scenarios presented in this report. This report has been produced as part of a Scott County Environmental Services Department project, which aims to create greater understanding about the future drivers that affect Solid Waste Management in Scott County.

REPORT PREPARED BY:

future→iQ

WORKSHOP HOSTED BY:



# TABLE OF CONTENTS

1.0	Introduction .....	4
2.0	Stakeholder Surveys .....	5
3.0	Scenario Planning.....	10
3.1	Scenario-based Planning Workshop .....	10
3.2	Developing Four Plausible Scenarios for the Future.....	11
3.2.1	Drivers Shaping the Future .....	11
3.2.2	Scenario Matrix – Views of the Future .....	12
3.3	Scenario A – High Waste Tough Goals.....	14
3.4	Scenario B – World of Change.....	16
3.5	Scenario C – Community Driven.....	18
3.6	Scenario D – Status Quo .....	20
4.0	Preferred and Expected futures .....	22
5.0	Next Steps .....	23
6.0	About Future iQ .....	25
7.0	Scott County Environmental Services, Minnesota.....	26
8.0	Acknowledgments .....	26





## 1.0 INTRODUCTION

The scenario planning work presented in this report was conducted as part of a Scott County Solid Waste Management project. The Scott County headquarters is located in Shakopee, Minnesota.

The components of this planning work included pre-Think Tank surveys, long-term Scenario Planning, and discussion about preferred futures.

- **Pre Think-Tank Surveys** – A survey was sent to invited participants of the scenario-planning workshop, and this input, along with assistance from County staff helped to create the axes of the scenario matrix and guide the workshop discussions.
- **Scott County Waste Management Future Think-Tank Workshop** – The scenario-based planning workshop held on March 27, 2017, provided an important opportunity to engage waste management professionals in a critical dialogue about the future and changing dynamics of solid waste in Scott County.

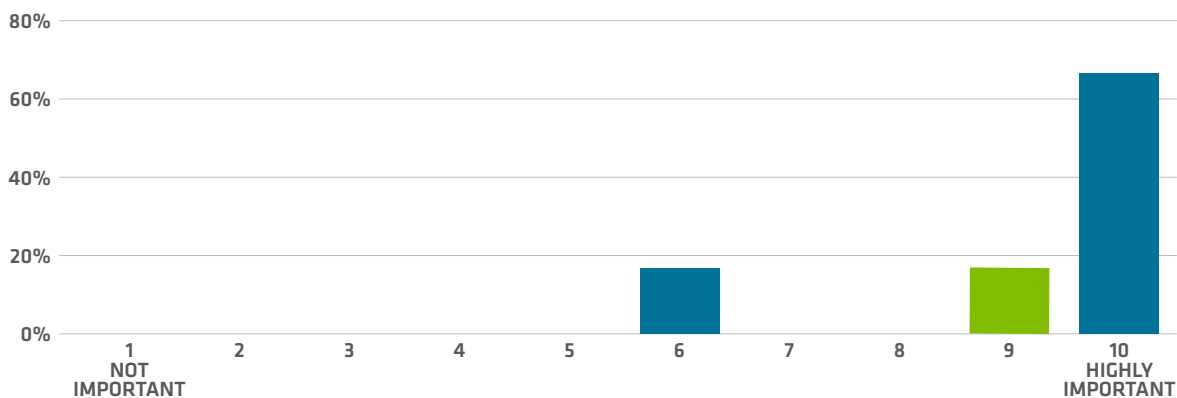




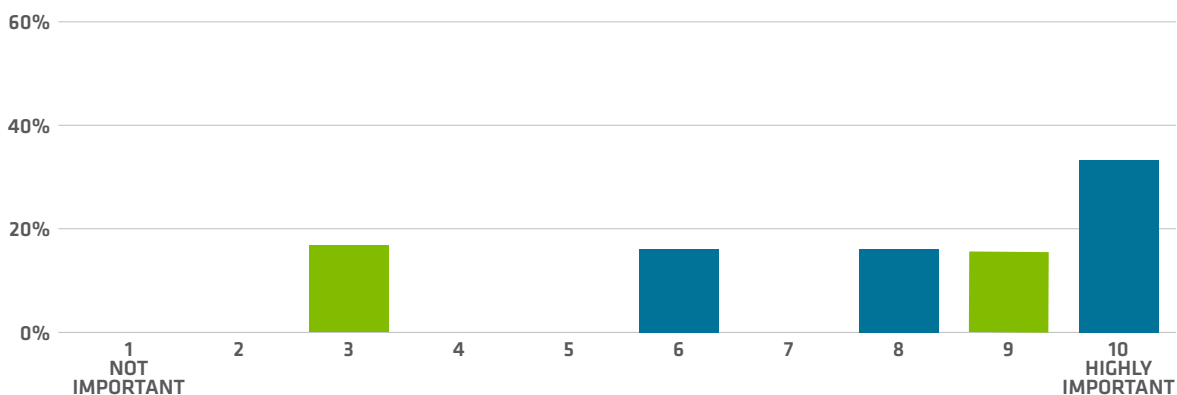
## 2.0 STAKEHOLDER SURVEYS

Prior to the planning workshop, surveys were conducted. Workshop participants were asked about their views on having a shared vision for the future of Solid Waste Management in Scott County. The following graphs shows a high level of importance placed on having a long term plan for Solid Waste Management in Scott County, and the importance of using the plan in decision-making.

### How important do you think it is to have a long term plan for Solid Waste Management in Scott County?

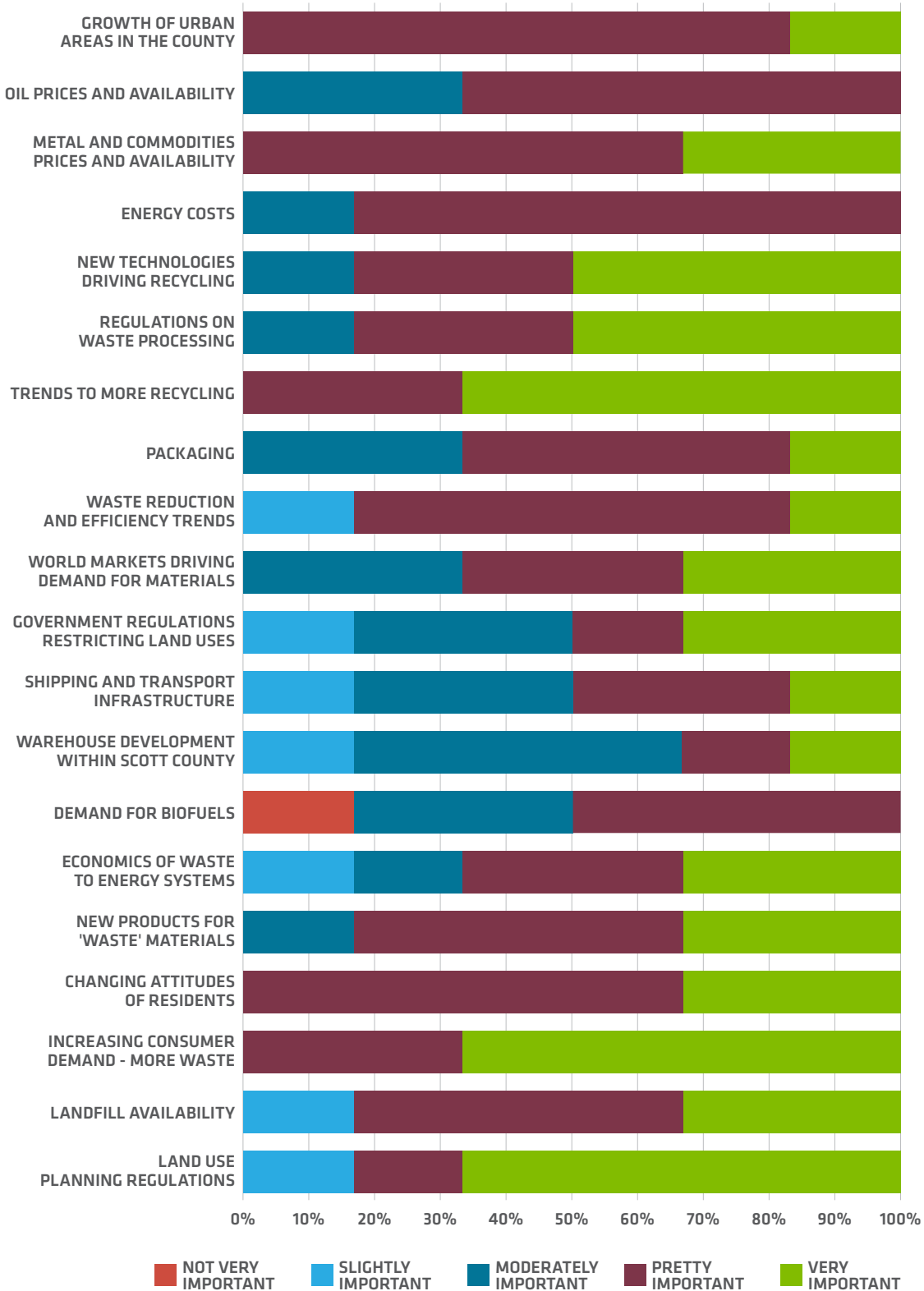


### How important will a long term Solid Waste Management Plan be in making decisions for YOUR business or organization?



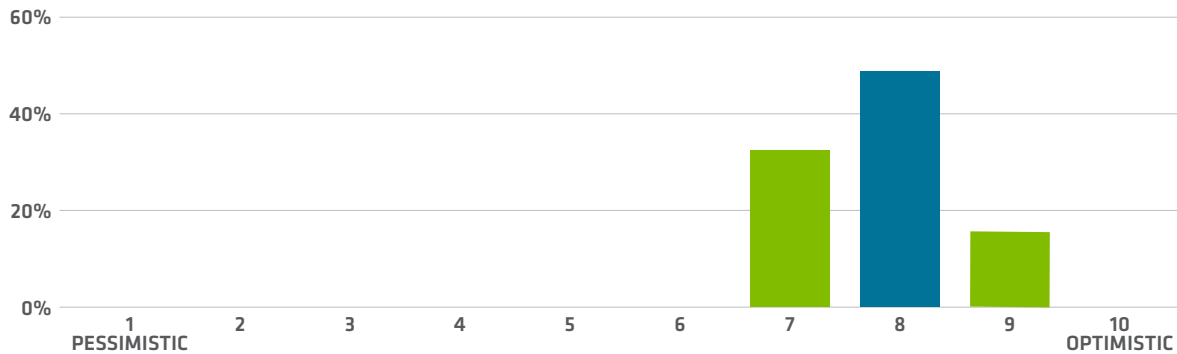
Survey respondents were requested to indicate the importance of the following 'drivers of change' as they relate to shaping Solid Waste Management in Scott County over the next five years.

**For the following 'drivers of change' rate how important they are to shaping Solid Waste management in Scott County over the next 5 years.**



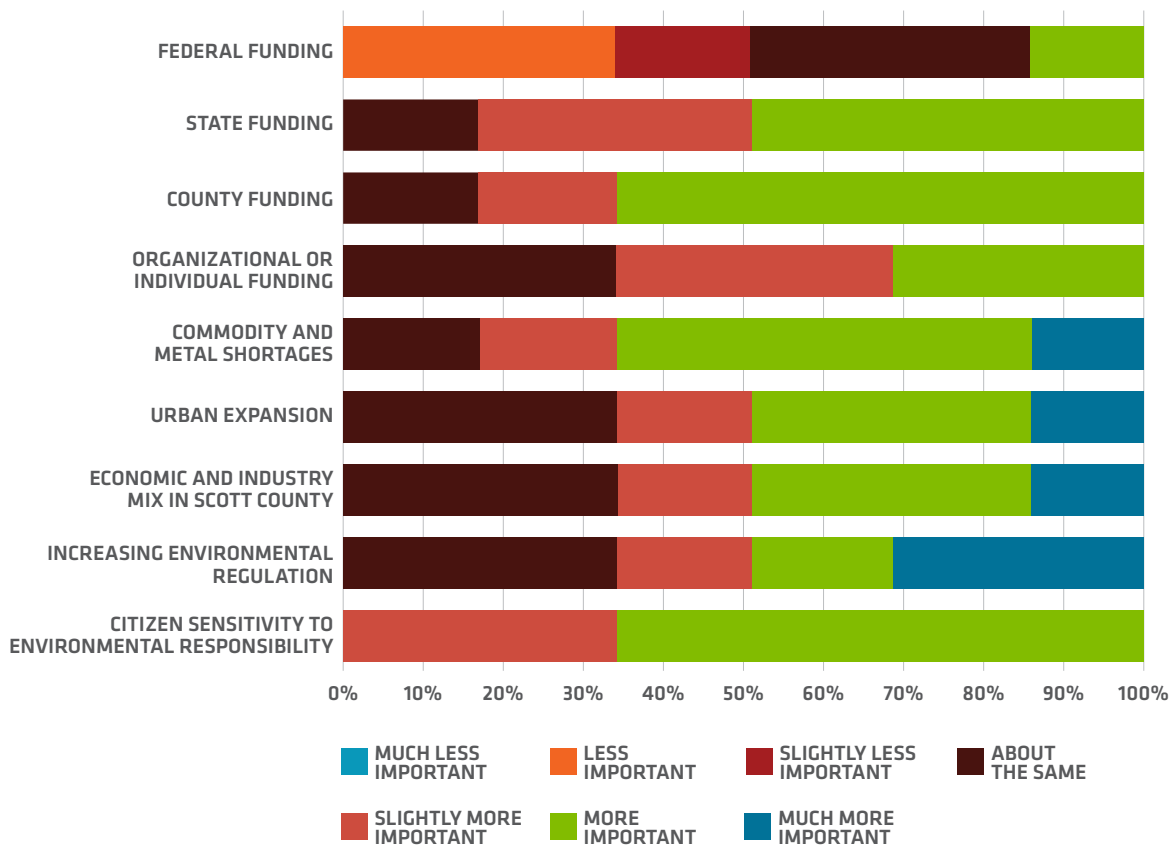
Survey respondents were asked to rate the future prospects for good Solid Waste Management in Scott County over the next 5-10 years.

## How would you rate the future prospects for good Solid Waste Management in Scott County over the next 5-10 years?



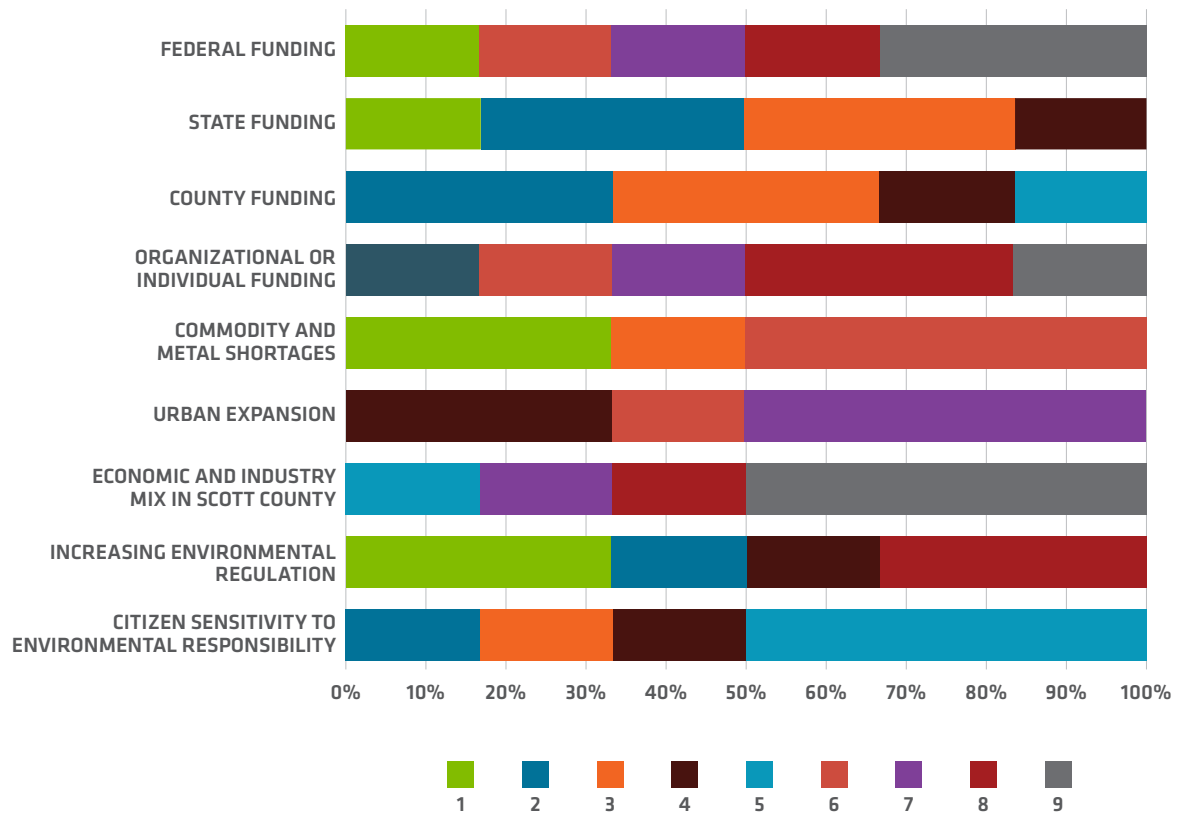
Survey respondents were asked to rate the importance of the following in terms of their impact on Solid Waste Management in Scott County over the next 10 years.

## In terms of their impact on Solid Waste Management in Scott County, how do you think the following will change in importance over the next 10 years?



Survey respondents were also asked to rank what they believed to be the relative importance of the following issues in terms of their impact on Solid Waste Management in Scott County over the next 10 years.

**In terms of their impact on Solid Waste Management in Scott County, rank what you believe will be the relative importance of these issues over the next 10 years. (1 = Highest important rank; 8 = Lowest importance rank)**



Survey respondents were asked to describe what they thought were the most important unrealized opportunities for Solid Waste Management in Scott County over the last 5 years. Unrealized opportunities included:

- Business recycling and organics use
- Public/private partnerships
- Institution of legislation/regulation
- Making the connection with public health and the community
- Incentives for businesses/schools/residents to recycle more and waste less
- Addition of a County Environmental Charge
- New technologies

Survey respondents were also asked to describe what they thought are the biggest threats and the biggest opportunities facing Solid Waste Management in Scott County over the next 10 years.

## Potential threats included:

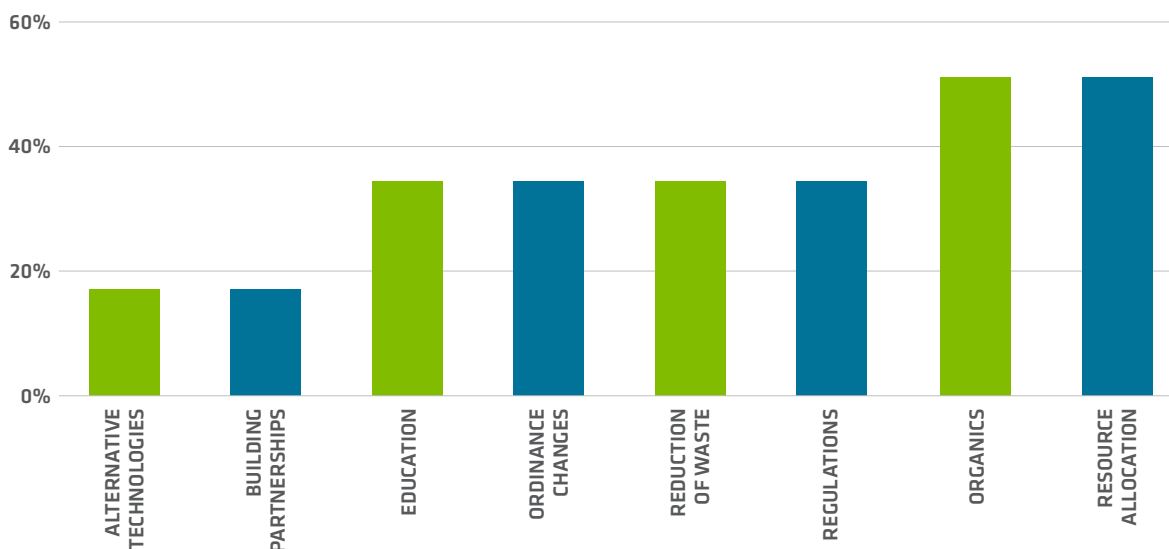
- Expanded regulations and costs as compared to subsidies and citizen interest in doing more
- Economics of recycling - demand for recycled materials and 'not in my backyard' mentality
- Resistance to change
- Loss of landfills
- Constant changes in commodity markets
- Difficulty with educating consumers and producers of waste
- Lack of feelings of environmental responsibility, and ownership and public awareness
- Not enough funds to offer assistance / affordability
- The market advantages of landfilling

## Potential opportunities included:

- Education and collaboration efforts with business, county and towns
- Public/private partnerships
- Accumulated funds for use
- Collaboration between other counties and municipalities
- New technologies that will move waste up the hierarchy
- With population growth and more awareness of environmental issues, there is a great opportunity for increased involvement in community and care for the environment
- With decreasing homeownership and increased multi-unit complexes, there is an opportunity to offer sustainable options to a greater number of individuals

In conclusion, survey respondents were asked what they thought were the three most important items to be addressed when considering the future of Solid Waste Management in Scott County.

## As we prepare for the upcoming workshop what are the 3 most important items to be discussed when considering the future of Solid Waste Management in Scott County?





## 3.0 SCENARIO PLANNING

The scenario-based planning workshop was conducted on March 27, 2017, and included invited Scott County Waste Management stakeholders. This half-day workshop was attended by approximately 18 participants. The workshop was intended to assist in the understanding of future drivers that affect solid waste management in Scott County, expectations of the MPCA, and what is wanted locally. Outcomes are intended to include recommendations for program/department updates that will be used to inform the upcoming comprehensive planning process.

### 3.1 SCENARIO-BASED PLANNING WORKSHOP

The Scott County Environmental Services Department contracted Future iQ to design and deliver a future orientated planning workshop to facilitate the understanding of the future drivers that affect solid waste management in Scott County. Future iQ's Scenario Planning process, provides a method to explore plausible futures, and consider the implications of various future scenarios. This workshop aimed to:

- Deepen the understanding and examination of how external events and local conditions could shape decision-making.
- Identify and understand the key influences, trends, and dynamics that will shape Scott County over the next 10 to 20 years.
- Create and describe four plausible long-term scenarios for waste management in the County.
- Begin exploring alignment around a shared future vision. The scenarios developed during this Scenario Planning process and outlined in this report are important to provide a framework to discuss future possible outcomes and implications. Workshop deliberations can assist in identifying key actions for Scott County and in identifying how various groups might best contribute to future developments. The design of the workshop included a presentation and discussion about key forces shaping the future at both global and local levels. These exercises and work were aimed to build a robust basis for the scenario formulation. Participants were then guided through a Scenario Planning process to develop four plausible scenarios for the future of waste





management in Scott County. The process involved exploration and discussion of global, regional, and local trends and forces of change; development of a scenario matrix defining four plausible scenarios spaces for the future; and, the development of descriptive narratives of each scenario. The event concluded with discussion of the scenarios, selection of a preferred scenario and first steps to determine the strategic actions required to create the preferred scenario.

## 3.2 DEVELOPING FOUR PLAUSIBLE SCENARIOS FOR THE FUTURE

Scott County solid waste management stakeholders and staff explored the future and developed plausible future scenarios, looking out as far as 2030.

### 3.2.1 DRIVERS SHAPING THE FUTURE

With the background of the global, national, and regional forces and how they relate to the waste management, participants were invited to respond to a survey prior to the workshop. The survey sought to gain insight into what participants believe to be the key drivers of Scott County waste management services and specifically how to address resource allocation.

#### **Creating scenario spaces – four plausible scenarios for the future**

Based on the Pre Think-Tank responses and key input from Scott County staff, themes were identified to become the basis for two axes on the scenario matrix that define four scenario ‘spaces’, with quadrants either towards or away for each driver cluster. These quadrants were used to formulate four plausible scenarios.

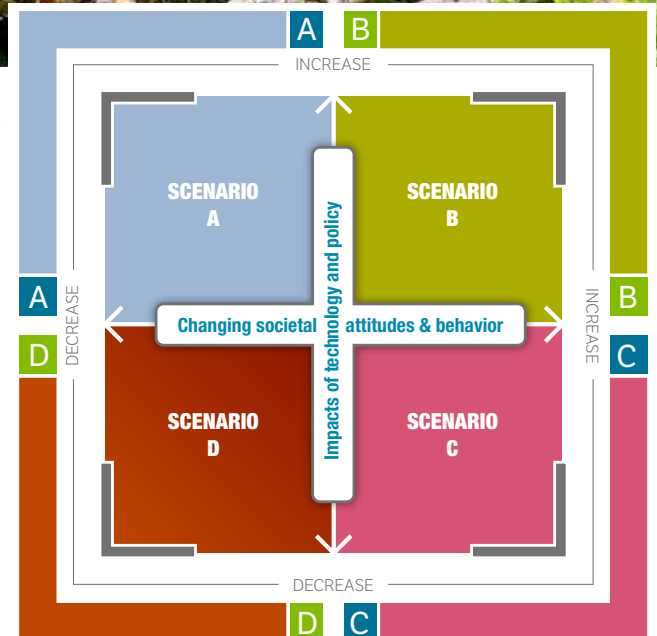
The two axes identified were **Changing societal attitudes and behavior** and **Impacts of technology and policy**.

Workshop participants were presented with the scenario matrix, defined by the two major axes of ‘Changing societal attitudes and behavior’ and ‘Impacts of technology and policy’ (see diagram). Brief descriptions were also attached to the end points of each driver axes. While these end points do not necessarily represent two extremes on a linear continuum, they are distinct enough to suggest some degree of separation and a plausible range of outcomes between them. The four quadrants (scenario





spaces) based on different combinations of the two cluster themes, were reviewed and discussed with the workshop participants. This discussion explored the description of the end points included in each scenario space, the possible interaction between these drivers, and how they formed the axes that defined the four scenario spaces. Participants were asked to consider the main attributes of each of the quadrants and to begin to speculate about how changing societal attitudes and behavior and the impacts of technology and policy would look in a future based on each of the quadrants.



### 3.2.2 SCENARIO MATRIX – VIEWS OF THE FUTURE

Event participants were randomly allocated to one of four groups and asked to formulate a scenario for their respective quadrant. Each group was asked to describe characteristics of the following dimensions of Scott County in 2030 under the conditions of the scenario quadrant that they had been given in terms of the triple-bottom line of social, economic and environmental characteristics:

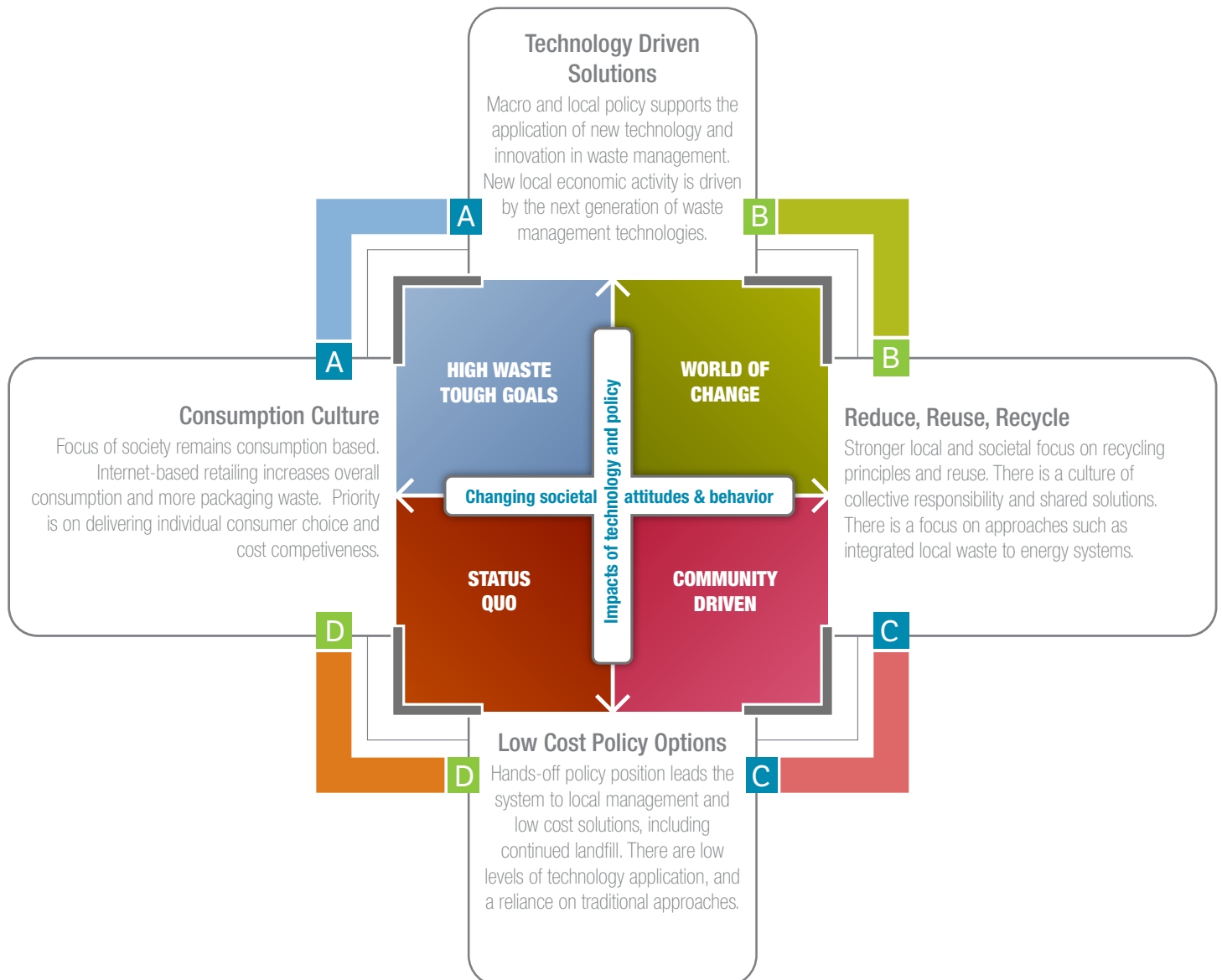
- Consumption patterns and waste types
- Policy setting and application of technology
- Waste management systems being utilized

Additionally, they were asked to devise major events or headlines of how the scenario occurred using the years 2020, 2025, and 2030 and to give their scenario a descriptive name. Once the scenarios had been developed, each group reported back, describing their scenario to the other workshop participants. Each group's notes for their scenario and the description were used to produce the detailed narrative for each scenario. Below is the scenario matrix showing the names of each scenario as described by the workshop participants.

These four scenarios paint very different plausible futures for Scott County waste management. The workshop participants considered them all as largely plausible futures, as in, they could actually happen.



Narratives and descriptions of each scenario, as developed by the workshop participants, are included in the following section. Each scenario has its subsequent consequences and impacts on waste management – impacting the community, services, and organizational fabric in different ways. No one future is the 'perfect' future, as each comes with its attendant challenges and implications. The process, however, does provide a way to tease out the future scenarios and examine them from a speculative standpoint. They represent different possibilities for the future, and are not predictions.

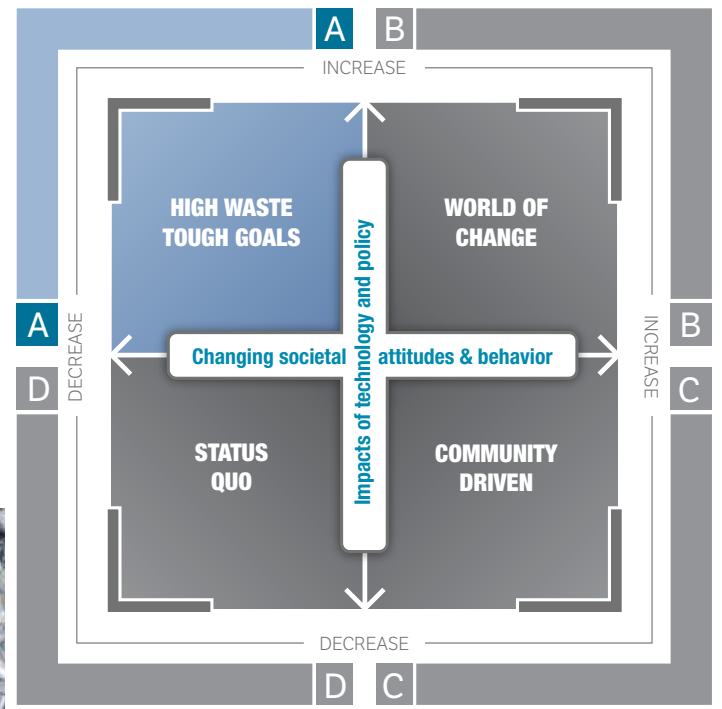






### 3.3 SCENARIO A – HIGH WASTE TOUGH GOALS

A consumption culture means high levels of individual waste production in the form of consumer items and packaging. Disposal rates are high placing increased burden on waste management systems. As technology capabilities increase, so does the complexity of waste items. New technologies lead to innovative waste disposal methods but because of an uneducated consumption culture, there is little incentive to reduce waste and waste production continues to climb.







## SCENARIO CHARACTERISTICS - 2030

### Consumption patterns and waste types / Characteristics

- Waste will be cheap, light weight and a lot of waste
- Consumption patterns will grow because it will be cheap

### Policy setting and application of technology / Characteristics

- Policy will focus on high tech not more regulation
- High goals in place but at end of life 'landfill, Dirty MRF'

### Waste management systems being utilized / Characteristics

- Single sort will be common
- Dirty MRF popular with more automation with high recoverable materials



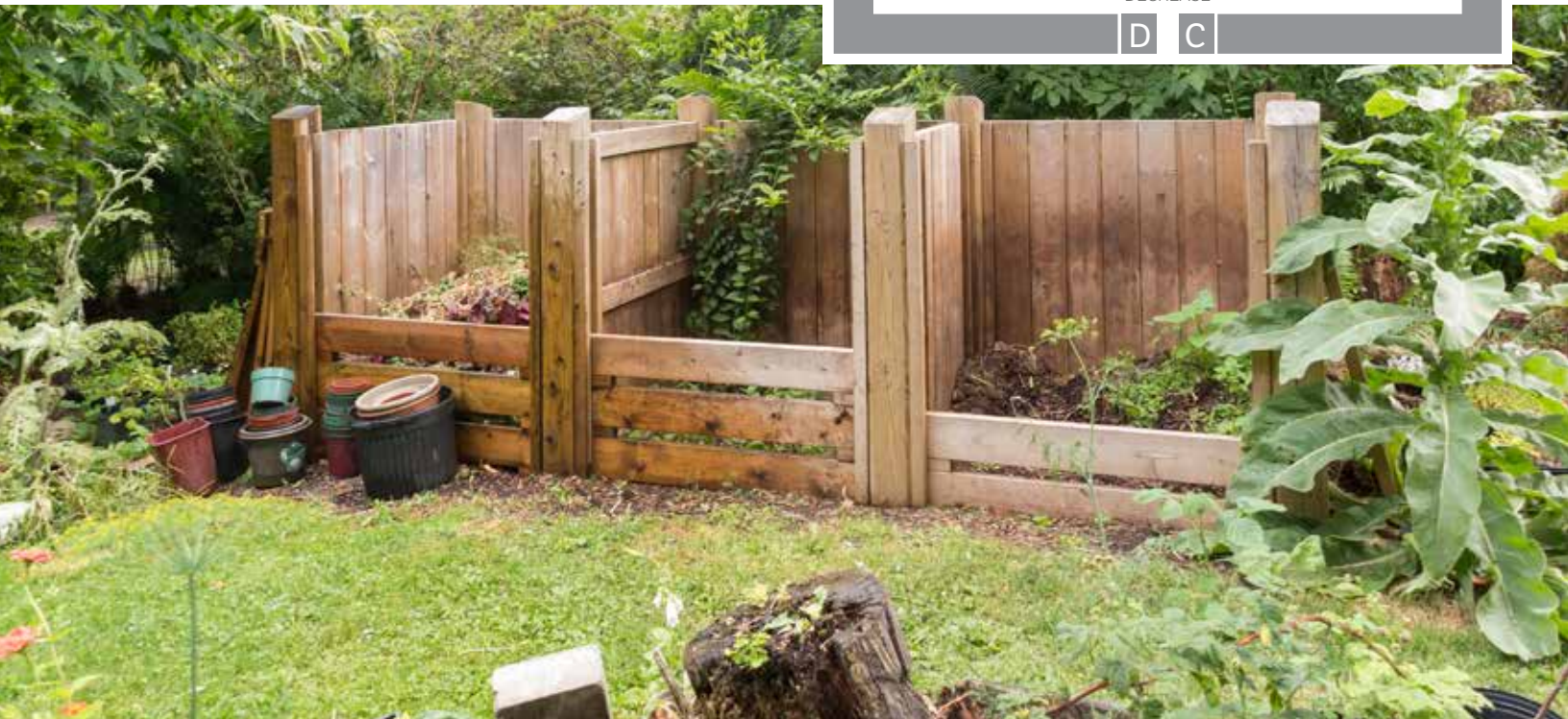
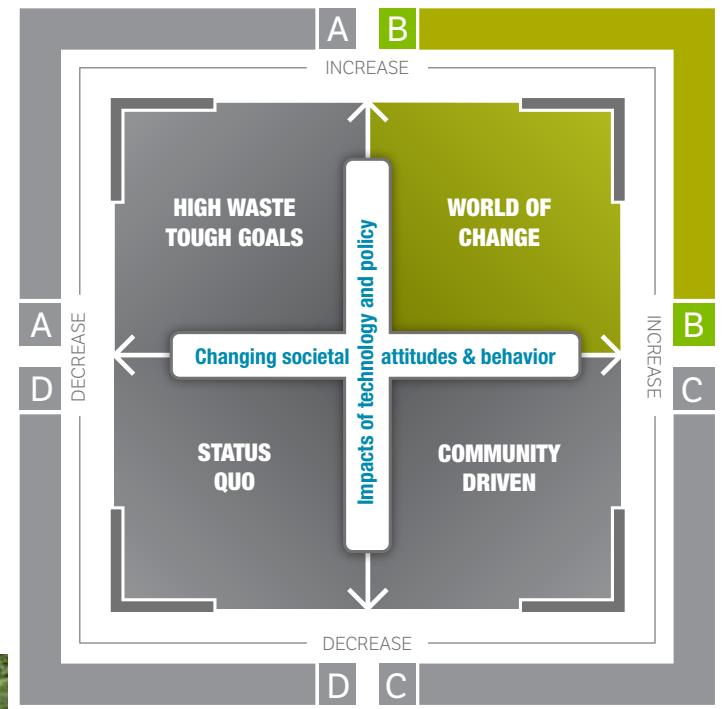
## HIGH WASTE TOUGH GOALS - HEADLINE NEWS

	2020	2025	2030
<b>Consumption patterns and waste types</b>	<i>Amazon ships directly more lbs to homes in Scott County</i>	<i>Amazon starts take back program</i>	<i>Scott County waste generation hits all time high Reusable 3D Printers</i>
<b>Policy setting and application of technology</b>	<i>Goals are set by Scott County</i>	<i>Amazon starts take back program</i>	<i>Reduced landfills – mining landfills; high tech dirty MRF</i>
<b>Waste management systems being utilized</b>	<i>Single stream throughout Scott County increase organics</i>	<i>Amazon starts take back program</i>	



### 3.4 SCENARIO B – WORLD OF CHANGE

New technologies and a collective sense of responsibility towards waste management leads to innovation and integrated local waste energy systems. Education about the impact of human consumption and waste production on the environment influences attitudes and behaviors. Increased use of compostables and organics leads to a strong adherence to recycling principles. A younger generation is more educated and grows up with a collective sense of responsibility towards waste and waste management policies. The exploration and creation of new technologies supporting waste management is supported and funded.







## SCENARIO CHARACTERISTICS - 2030

### Consumption patterns and waste types / Characteristics

- Compostables
- Lightweighting
- Some reduction
- Focus on organics (local solutions)

### Policy setting and application of technology / Characteristics

- Environmental education supportive of waste management
- Public policies that lowers costs of comprehensive processing allows for material quality/marketability
- Economics – adaptable – Public/Private Partnerships

### Waste management systems being utilized / Characteristics

- Sorting system for public & technical sorting system for all waste types
- Commodity focus/benefication for value



## WORLD OF CHANGE - HEADLINE NEWS

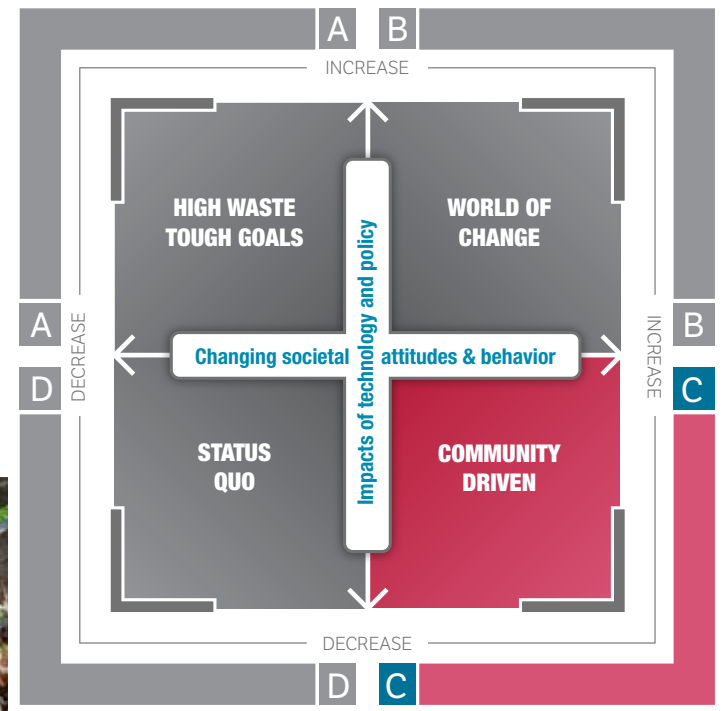
	2020	2025	2030
<b>Consumption patterns and waste types</b>	<i>Organic recycling proves to work</i>	<i>Organic recycling adopted countrywide</i>	<i>90% recovery – Reduction of perception</i>
<b>Policy setting and application of technology</b>	<i>Public demand for better results – Economic models</i>	<i>Multi-country waste processing returned approved</i>	<i>Public/BIZ Gen; Collection; Processors; Markets – WM System in Blk.</i>
<b>Waste management systems being utilized</b>	<i>New facts about waste point in new direction</i>	<i>3 new recycling commodity facilities commissioned</i>	<i>Technology has allowed recycling to reach all time high</i>





### 3.5 SCENARIO C – COMMUNITY DRIVEN

Low regulation leads to a hands-off policy on waste management and counties and municipalities are left to their own devices with respect to waste management. More educated communities seek to reduce and recycle using low cost systems and local production methods; other communities continue to emphasize landfill use. Low levels of technology application encourages the continued use of traditional approaches to waste management.







## SCENARIO CHARACTERISTICS - 2030

### Consumption patterns and waste types / Characteristics

- Less consumption/more environmentally conscious, more reduce/reuse/recycle
- Changing residential use, change in commercial waste (more farm to table)
- Less commercial waste, less food waste
- Make your own food, less waste, gardens
- More reuse/freecycle market
- Education is cheap, society shift, environmentally sensitive

### Policy setting and application of technology / Characteristics

- More community based with less policy, self-regulation, relying on people and not technology
- People choosing services with organics and what haulers offer
- Shift in what haulers offer, more recycling because it is cheaper
- More manufacturing responsibility and opportunity for reuse/recycling/reclaiming materials

### Waste management systems being utilized / Characteristics

- More options driven by cities
- More organics drop offs, co-collection (yard waste & food waste)
- Backyard composting
- As population increases, our landfill use stays the same



## COMMUNITY DRIVEN - HEADLINE NEWS

	2020	2025	2030
<b>Consumption patterns and waste types</b>	<i>Local resourcing at an all-time high</i>	<i>Community stepping up recycling options (more organics)</i>	<i>Community exceeds 75% recycling rate</i>
<b>Policy setting and application of technology</b>	<i>Petition for mandated recycling failed again*</i>	<i>More people join the fight for solid waste reduction</i>	<i>Businesses being pressured by consumers to change wasteful behaviour</i>
<b>Waste management systems being utilized</b>	<i>Cities discuss community options</i>	<i>Strength in numbers: communities organize collection</i>	<i>As population soars. Landfill use stagnant</i>

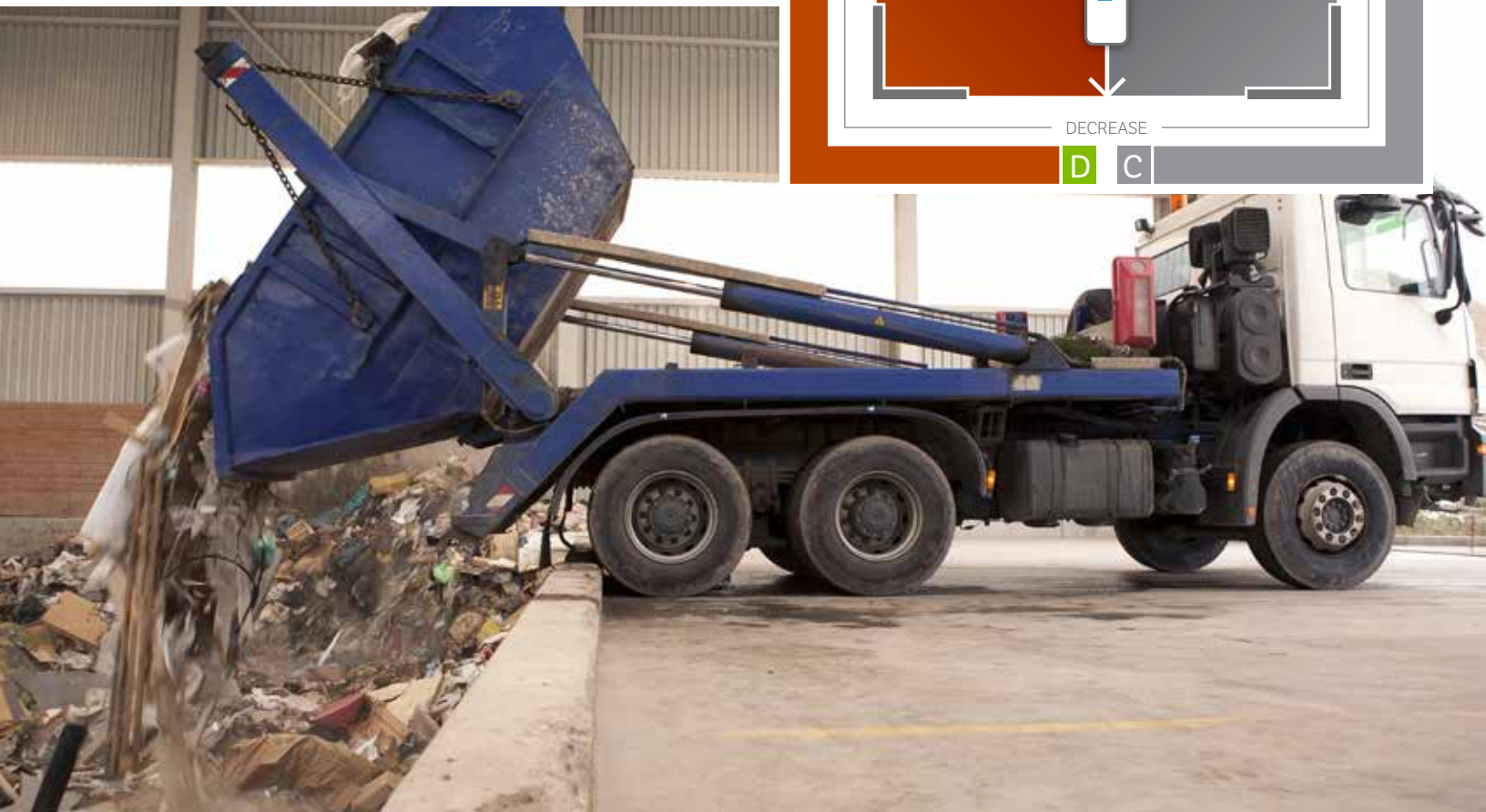
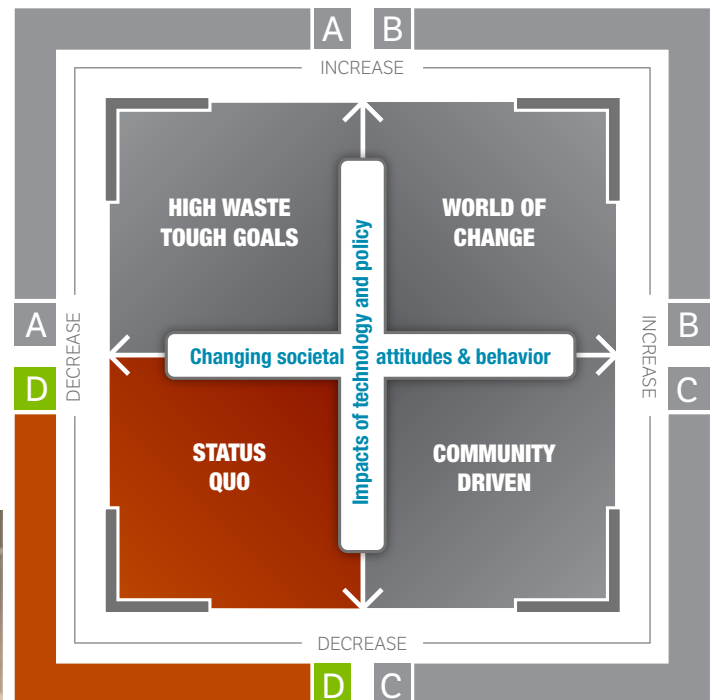
\*People driven – People want more regulation by not supported by local governments





### 3.6 SCENARIO D – STATUS QUO

The combination of a consumption culture and low regulation leads to continued high levels of waste production and use of landfills for disposal. Low technology capability in waste management causes increased difficulties with more complex waste disposal needs. A ‘not in my backyard’ attitude prevails as waste accumulates in less economically advantaged communities and wealthier communities are able to transfer waste disposal responsibilities leading to unequitable health risks.





## SCENARIO CHARACTERISTICS - 2030

### Consumption patterns and waste types / Characteristics

- More waste being generated
- More recyclables will be available
- Purchase and throw?
- Volume waste being generated
- More different types of waste

### Policy setting and application of technology / Characteristics

- Market drives the waste shed
- Waste companies invest when it is cost effective
- Do you assume that current policies remain in place?

### Waste management systems being utilized / Characteristics

- Landfills, MRFs, compost stilling being used
- Waste will go where least expensive option



STATUS QUO - HEADLINE NEWS			
	2020	2025	2030
<b>Consumption patterns and waste types</b>	<i>Consumers buying cheap product, more waste</i>	<i>Plastics increasing in waterstream</i>	<i>MRFs unable to deal with packaging waste</i>
<b>Policy setting and application of technology</b>	<i>Markets driving waste to landfills</i>	<i>No Incentive for private markets</i>	<i>Solid waste facilities closing</i>
<b>Waste management systems being utilized</b>	<i>Landfills filled at record rates</i>	<i>Landfills nearing capacity, the future of landfilling?</i>	<i>Wanted: Landfill Sites</i>



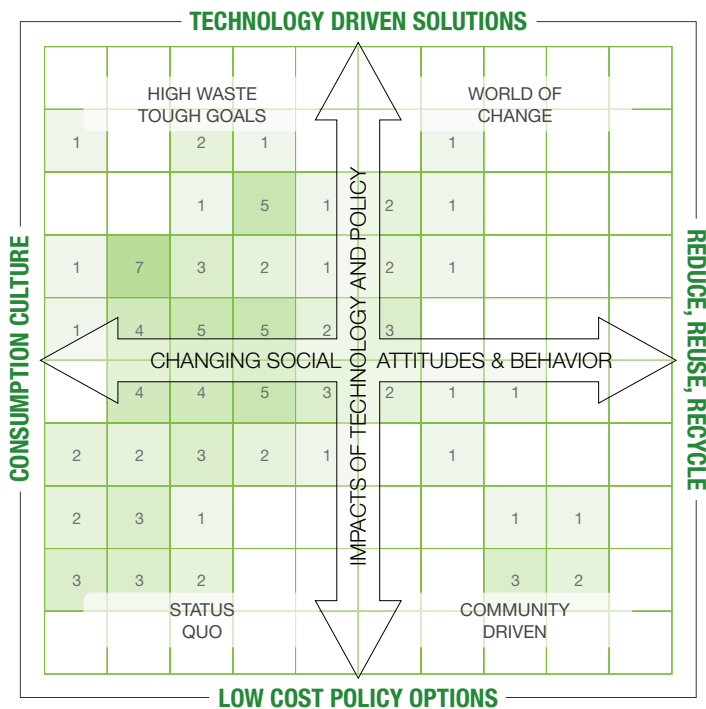


## 4.0 PREFERRED AND EXPECTED FUTURES

The four scenarios presented represent a range of plausible outcomes for Solid Waste Management in Scott County. Workshop participants were asked a series of questions regarding their views of the preferred and expected future. The expected future is the one they deemed most likely to happen if there is no change in the current trajectory. The workshop participants indicated that Scenarios A and D are the scenarios they believed most represented the current direction of the region.

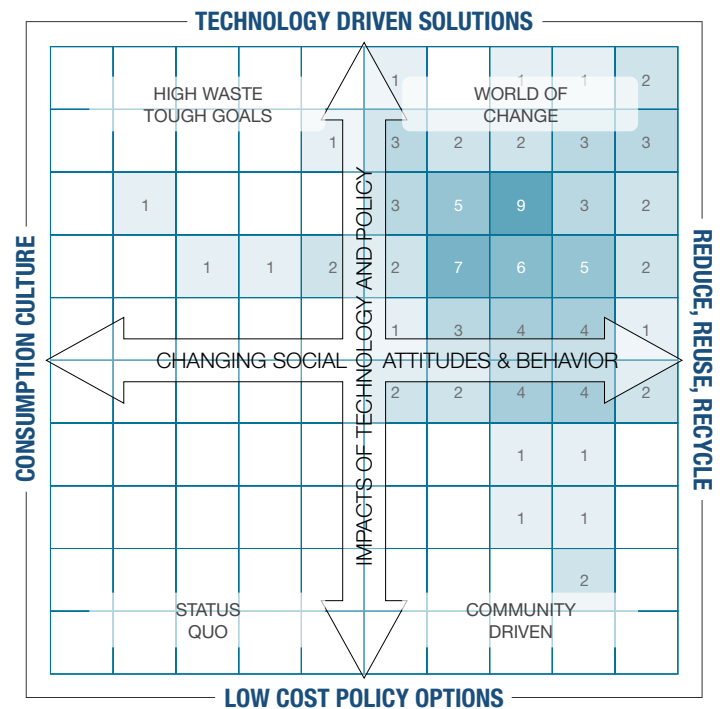
### SCOTT COUNTY SOLID WASTE MANAGEMENT

EXPECTED FUTURE – 2030



### SCOTT COUNTY SOLID WASTE MANAGEMENT

PREFERRED FUTURE – 2030



While each of these scenarios were viewed as plausible, workshop participants expressed a clear preference for one of the presented outcomes, Scenario B, World of Change.



## 5.0 NEXT STEPS

Workshop participants discussed the ramifications and implications of failing to achieve the preferred future. There was a unanimous alignment of people that 'World of Change' represented the preferred future scenario, however very few people thought that was the current trajectory. The preferred future 'World of Change' outlines the basis of a shared vision for the organization. In addition, it gives an indication of the focus areas of action that will be needed for this vision become a reality. Workshop participants discussed what they believed the next steps should be, and how they could move forward.

The axes that shape this future are increasing 'Changing societal attitudes and behavior' and increasing 'Impacts of technology and policy'. Because of the long-term nature of the Scenario Planning methodology, stakeholders can often see the 'distant future vision (2030)' as unattainable and unrealistic. However, this often underestimates the progress that can be made of the intervening years, and the cumulative positive impacts of change. As an example, some of the existing work in the county is already significantly shaping the future directions and actions.

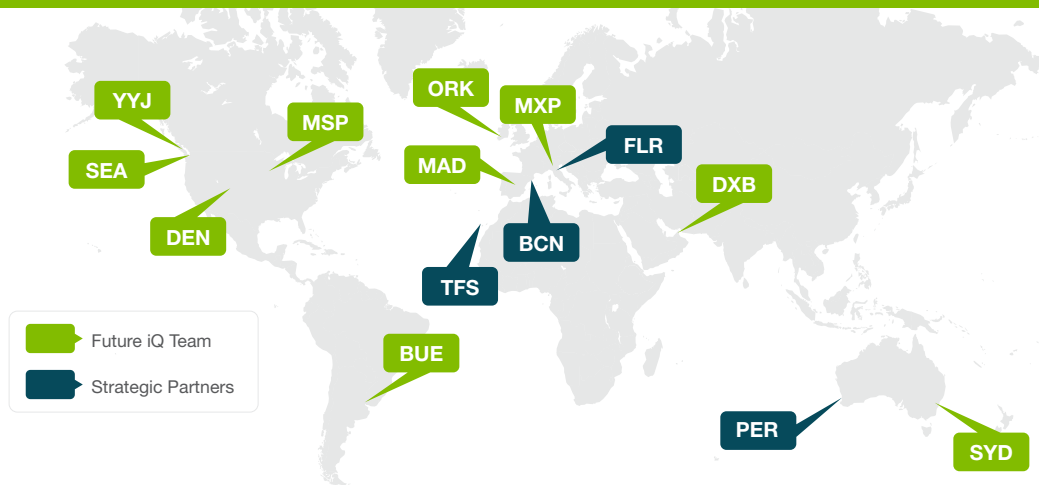
The scenario framework also can help guide additional actions to inform the future, especially pertaining to building infrastructure, collaboration and capacity. The next phase of the planning process for updating the County Solid Waste Management Plan is determining what the County and its solid waste stakeholders want for the future. The scenario developed will help inform this discussion. Implementation strategies will also be developed and discussed considering the trends and drivers identified in the workshop to insure the flexibility to adapt as the future unfolds.



This report lays the foundation for greater understanding of waste management in Scott County. The preferred future 'World of Change' outlines the basis of a shared vision for County direction. The scenario framework helps identify and focus on areas of action that will help this vision become a reality.

Towards the conclusion of the Think-Tank, participants were asked to brainstorm what would be needed for the waste management plan to achieve the preferred future scenario, World of Change. Three overarching needs were identified:

1. Support for technology – Policy must become supportive of these programs, perhaps by providing incentives and additional resource allocation
2. Need to provide perception of firmness and equity; demonstrate benefit to residents; enable experimentation of technology
3. Behavior adjustments will be needed - Using the levers of education and economics



## 6.0 ABOUT FUTURE IQ

Future iQ is a market leader in the development and application of scenario planning; network analysis, industry and regional analysis, and community engagement and capacity building. Future iQ specializes in applying innovative tools and approaches to assist organizations, regions and industries shape their economic and community futures. With over a decade of business experience, the company has grown to have a global clientele spanning three continents. To learn more about Future iQ, and our recent projects visit [www.future-iq.com](http://www.future-iq.com) or by email at [info@future-iq.com](mailto:info@future-iq.com)

### Report and Scenario Planning workshop prepared by:



#### DAVID BEURLE, CEO, FUTURE IQ

As CEO of Future iQ, David specializes in creating future planning approaches for the use in regional, community and organizational settings. David has worked in the field of organizational and regional economic and community planning for over 20 years. His work in community and economic development has earned his work international, national and state awards.



#### HEATHER BRANIGIN, VICE PRESIDENT, BUSINESS DEVELOPMENT

Heather has an academic background in Political Science, International Relations and Education and is committed to helping people understand global interconnectedness and collaboration. She is past President and current Advisory Council member of the United Nations Association of Minnesota and has worked for over 20 years in the fields of international education and development.



#### MARCUS GRUBBS, MURP, AICP, PLANNING SPECIALIST

Marcus is a certified Planner with an academic background in Urban and Regional Planning and Environmental Studies. He recently completed a Graduate Research Fellowship with the University of Minnesota – Twin Cities, managing a research collaborative exploring the future of agricultural production, economic development, and environmental conservation in Southern Minnesota. Marcus chairs a non-profit policy committee and participates in the Big Brother program.





## 7.0 SCOTT COUNTY ENVIRONMENTAL SERVICES, MINNESOTA

The Environmental Services Department of Scott County consists of several service areas including household and business hazardous waste, septic systems, watershed management, natural resources, recycling and solid waste management, and the environment. For the purposes of this report, the Environmental Services Department of Scott County contracted Future iQ to facilitate a workshop that would assist solid waste management stakeholders and staff in the understanding of the future drivers that affect solid waste management in Scott County. This increased understanding will be used to inform the department's recommendations to the upcoming comprehensive plan update.

**For more information on the Environmental Services Department of Scott County, please contact:**

**Paul Nelson**, Environmental Services Program Manager

Scott County Environmental Services

200 Fourth Avenue W.

Shakopee, MN 55379

Email: [PNelson@co.scott.mn.us](mailto:PNelson@co.scott.mn.us)

Tel: 952-496-8054

## 8.0 ACKNOWLEDGMENTS

Future iQ would like to thank the Paul Nelson for the significant time and effort put into the planning and execution of this planning workshop. Future iQ would also like to thank Kate Sedlacek and Steve Steuber for their additional assistance. We sincerely appreciate your contributions.

